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ABSTRACT

Part I of this social studies report presents the results of curricular research, at Utah State University, to develop a set of "critical thinking" concepts appropriate for the analysis of political-ethical public issues, and to prepare materials and suggestions for teaching those concepts. The analytic concepts, presented in both outline and narrative form, are the nature of decisions about public issues, the need for order, the nature and importance of language, arguments over words, disagreements over facts, disagreement over values. Thirty-three "teaching bundles" detail suggestions for teaching these concepts. Part II of the report describes efforts to repeat and extend the research of the Harvard Project, which investigated the effects of two teaching styles (socratic and recitation) and the interactions of student personality with teaching style in affecting learning. (References, tables, and figures are included.) (MF)

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THE ANALYSIS OF PUBLIC ISSUES: CONCEPTS, MATERIALS, RESEARCH

Project No. 6-2288
Contract No. OEC-4-7-002288-2036

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and
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Bureau of Educational Research
Utah State University
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PART I

CURRICULUM DEVELOPMENT--RATIONALE AND PRODUCT

CHAPTER ONE

A BRIEF RATIONALE

Every curriculum development effort, whether carried out by an individual teacher or by a funded project, is based on many assumptions about reality--what the world is like, what the world can be like, what the world should be like. Frequently, these assumptions go unexplicated. Rarely is the frame of reference brought into the open, examined, and the parts related to one another to the point that one could say that a conscious rationale underlay the curriculum work. Consequently, the frame's impact on the curriculum is subtle and unexamined, and narrow biases and prejudices slip in, as it were, through the back door (Beard, 1934, p. 180).

There are a number of questions that can be asked to clarify a curricular frame of reference. In the social studies, these include: What is your conception, your definition, of social studies? What are your normative views of the social world? What are your empirical conceptions of the social world? What is your conception of social science and historical knowledge? What is your view of the nature of thinking? (Shaver & Berlak, 1968, pp. 2-3)

Undoubtedly, there are other important questions relevant to laying out a rationale for curriculum building; or, put another way, there are subcategories of questions which cut across those listed above. For example, a person's view of the nature of man is undoubtedly an important part of the frame of reference by which his curricular work will be guided. To a large extent, questions having to do with the nature of man are subsumed by at least three of the questions already listed--those having to do with normative and empirical conceptions of the society (man is basically a social animal, and the consideration of society is not complete unless the society's notions about the nature of man are taken into account), and with the nature of thinking.

For any one curriculum effort, it may not be necessary to develop a complete statement of position for each of the questions. However, to the extent that conceptions of man and society might influence the curriculum work, these considerations should be explicated. This will not only provide an explicit basis for curriculum development, but will facilitate the task of the person who must later judge the curriculum. For he will be interested not only in the product which has resulted, but in the frame of reference presumed by the product and in the relationship (or lack of relationship) between the frame and the product.

Although such specification and elaboration of underlying premises have been rare, they are not nonexistent. They have ranged from rather brief efforts directed primarily at delineating objectives, content, and techniques (Fenton, 1967; Frankel, 1969) to more extensive treatments of the societal questions (Oliver, 1957; Oliver & Shaver, 1966). What follows is an attempt to lay out the pertinent elements of the frame of reference which set the guideposts for the Utah State University Social Studies Project, "A Curriculum Focused on Thinking Reflectively about Public Issues."*

The Social Studies

Because there tends to be considerable ambiguity and attendant confusion over the use of the term "social studies," and since we place our project under that rubric, it makes sense to begin by trying to make explicit our meaning for the term. An appropriate distinction to help in our clarification is that between "social studies" and "social sciences." We consider the *social sciences* to be those academic areas concerned with the empirical study of man in his social environment. Academic areas such as sociology, psychology, and economics are obviously social sciences. Although perhaps not so obvious, we also include history as a social science, because historical study basically involves the empirical investigation, guided by academic cannons, of past man in society. Excluded are areas such as literature and art which, although concerned with the study of man, are esthetically rather than empirically oriented.

Given the above definition of the social sciences, *social science education* becomes the conveying of the knowledge of the social sciences--the methodology used in the attempts to understand social reality and the resultant descriptions, understandings, and interpretations. Social science education is guided by academic criteria: Are the content and the methods of presenting it faithful to the latest findings judged as acceptable by the scholar's peers? Does the treatment of the methodology of inquiry faithfully reflect those techniques and strategies actually being advocated and used by scholars active in the field? Social science education is, then, responsive to the demands of the discipline, and instruction should reflect careful consideration of its structure (Schwab, 1964).

What then is *social studies education?* In particular, how does it differ from social science education? In the past, definitions of social studies have been used which obscured any differences between social studies and social science education. A common definition has been that the social studies are the social sciences adapted and simplified for pedagogical purposes. Such a definition seems to ignore reality. It focuses back upon the academic scholar while overlooking the fact that social studies teachers commonly teach all students in the school at one time or another, not just those who want to become social scientists or those who are interested in the abstract conceptualizations of the social scientist.

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*Much of what follows has been said by the authors, alone and with others, in other places. It seems important, however, to pull these justifying ideas together briefly in the context of this particular project so that the reader and potential curriculum user will have no doubts about the rationale underlying our work--or will not have to search out several writings to resolve his doubts. We cannot claim that our rationale is airtight. Nevertheless, to attempt to explicate one's frame of reference seems immeasurably more advantageous to the potential curriculum user than to ignore it.

A definition of social studies should, therefore, go beyond the predispositions and concerns of the academicians. We find it more suitable to define *social studies* as that part of the general education curriculum centrally concerned with educating citizens for political participation in a democratic society (Shaver, 1967). The implications of such a definition are far-reaching. Once it is accepted, curricular mandates can no longer come directly from the scholar attuned to his own discipline, but must be based on a consideration of the nature of the society which general education is to serve.

The Society

Given the emphasis in our definition of social studies on participation in a democratic society, a critical element in the frame of reference from which we have approached our curriculum work is our notion of democracy. Various definitions of democracy and their implications for education have been traced elsewhere (Shaver, 1968), and the definition which has guided our work has been dealt with in greater detail (Oliver & Shaver, 1966) than will be the case here.

Rather than worrying initially about the forms of democracy--its tangible evidences, such as open elections--we have focused on the underlying assumptions which seem to support and are supported by the forms. Above all else, a concern for the individual--for his dignity, his oneness, his humanness--runs through the democratic philosophy. For example, we value majority rule, but not at the sacrifice of the individual. Individuals may be forced to do things they do not want to do, but there are legal and moral restraints on the majority. Special attention is paid to arguments from individual conscience. For instance, the government respects conscientious objectors even though war is seen by a good share of the citizenry as necessary, or at least contributory, to the survival and/or prosperity of the society. Moreover, the valuing of majority rule itself seems to be contingent upon a respect for the individual, unless one assumes that it is based on the premise that the truth inevitably results from summing opinions. If each individual is valued, has dignity and worth, then each should be able to make his contribution toward the determination of public policy or to the choice of those who will vote directly on the policy.

Other democratic values are also dependent upon the society's commitment to human dignity and worth. Freedom of speech, the right to assemble, freedom of religion, due process of law, equality of opportunity--each of these reflects a basic concern for the individual, his right to expression, to be protected from the whims of governmental officials, to not be penalized for circumstances of life beyond his control. In essence, we say that if a man is to have dignity, in the sense of basic humanness, he must have certain rights and freedoms. These are the basic values of a democratic society. And, of course, these statements of norms not only define the dignified man, they also help to maintain a society in which man does have dignity. The right to vote, to speak out freely, to assemble, to be assured of due process of law--each of these values helps to insure that the government, responding as an independent agency or to the demands of one's fellow men, will not deny the individual his dignity.

Values and Controversy

The ultimate value, human dignity, is vague and so are the basic values of the society which define and maintain it. What is meant, for example, by freedom of speech? If one values freedom of speech, does this mean that anyone should be allowed to say anything he wishes under any circumstances? Defining the meaning of the society's value commitments is a basic task of the government through its policy and judicial decision-making processes. Obviously, a long string of Supreme Court cases give current meaning to freedom of speech. By the same token, when Congress passes an open housing law, further definition of "equality of opportunity" has taken place. Nevertheless, the governmental and personal action called for by the values commonly remains either unspecified or open to debate. This debate over proper aims and action is the crux of controversy in our democratic society. It reflects our commitment to rationality--that is, to the belief that each man is capable of having a say in his fate, and should be allowed to do so*. But the debate also reflects the nature of our society and of the society's values.

It is an old saw that we have a pluralistic society. Yet the implications of the saw are often overlooked in social studies curriculum development work. Pluralism makes its contribution to the viability of a democratic society; in fact, it has been proposed that pluralism is necessary if democracy is to involve a group of people having real decisions to make about their destiny. Without pluralism--that is, a multiplicity of societal subgroups competing to control the society's destiny--decision-making is meaningless. In a monolithic society, if such a thing were possible, consensus would make debate over proper aims and actions a hollow exercise. Having alternatives advocated creates an awareness of problems as well as suggesting policies to handle them. Pluralism creates possibilities for controversy, conflict, and divisiveness. Yet the conflict among competing views can have the effect of revitalizing the society's normative commitments (Coser, 1956).

One source of conflict in our pluralistic society is the tendency for different subgroups with differing experiences and commitments to interpret the vague basic societal values in different ways. Few in this society would deny that freedom of speech is important; there is obviously, however, considerable disagreement over how far free speech should be allowed to go, for example, on university campuses or in time of war. By the same token, there is a general commitment to equality of opportunity, but considerable disagreement over whether this means that homeowners should not be allowed to discriminate on the basis of color or creed when selling their homes.

The vagueness of our value commitments is not the only source of conflict. The values to which we are committed are often contradictory among themselves. That is, any one decision is likely to support one or more values while denying one or more others. Myrdal, in his classic *An American Dilemma* (1946), pointed out that our general value commitments often conflict with our more specific commitments. A businessman might sincerely believe that equality of opportunity is important, yet in a specific situation refuse to hire someone simply because of his race or creed.

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*See page 7.

However, our basic values conflict as well. A proposal to condemn property for urban renewal might be defended in the name of the general welfare of the society and opposed in the name of property rights. The military draft is supported by appeal to national welfare and objected to on the grounds that it violates individual conscience. Again, the conflict is due in part to the tendency of different societal subgroups to place different emphases on values and to construe controversial situations in terms of different values.

It would be a mistake, however, to think that value conflict takes place only between different individuals and groups. We have already noted Myrdal's observation that an individual might act in a specific situation in such a way as to belie a more general value commitment. Individuals are also susceptible to conflict between general values. A person may believe that it is good to fight to defend one's basic rights (as in the case of the American Revolution), yet oppose violence on the part of blacks to gain their rights on the grounds that it is important that we follow the orderly, legitimate decision-making processes of the society. Of course, we use various psychological mechanisms to avoid awareness of the conflicts or to handle them without undue discomfort (see, e.g., Myrdal, 1946, pp. 1027-1031; Festinger, 1958). Nevertheless, the fact is that intrapersonal as well as interpersonal value conflict is present or latent when we confront public issues.

The Implications for Social Studies

One salient characteristic of our society's commitment to human dignity is a belief in the basic intelligence of man. That is, it is assumed that man is an intelligent being, capable of making decisions through rational means, and of being educated to improve his thought processes. This belief in intelligence does not deny the importance of nonrationality--of gut level commitments, especially to the basic values of the society--and of intuition and insight. Faith, even if only in the long run in the rightness of man's reason, is not rejected. Yet the commitment to rationality as an essential aspect of man's dignity has meant a heavy emphasis on the belief that man can shape his society and his personal life through intelligence.

In the light of society's commitment to rationality and to the idea of the educability of man, the school has taken on the task of attempting to increase man's intelligent reflection on important matters. Social studies educators in particular have assumed that a major share of their responsibility should be the improvement of intelligence in the area of citizenship education--specifically, the preparation of citizens to make more rational, intelligent decisions about the problems facing society or about the individuals who could best deal with those problems in governmental office.

What conditions seem necessary for the social studies curriculum to meet that objective? Any attempt to meet this aspect of citizenship education must proceed from a clear recognition that the most hotly debated issues facing society are ethical in nature--that is, they involve questions about proper aims or actions. Furthermore, attempts to justify proposed solutions will inevitably be cast in terms of our standards or principles of worth--i.e., our values. Interpersonal conflict will result as different subgroups define basic values differently or emphasize different values; intrapersonal conflict will occur to the extent that we recognize the inconsistencies among our own values. An adequate approach to teaching thinking in the social studies curriculum must take into account the need to choose between or among values in making ethical decisions.

In other words, general exhortations to teach for critical thinking, which have been so frequent in the social studies literature and in statements of objectives for the social studies, are not of much instructional value, except insofar as they motivate teachers at least to be concerned with rationality in the classroom. (It is, of course, dubious that exhortations in the literature and in guides even fulfill that role.) The exhortations must be reduced to specific frameworks of critical thinking and to means of teaching the frameworks. And, it is essential that those people developing critical, or reflective, thinking schemata be certain about the type of situations to which they are to be applied. In the social studies, we would contend that such schemata must be developed in the context of making decisions about public issues, recognizing that such decisions are at heart ethical decisions. The latter point will be pursued in greater depth in the following chapter.

Models for Critical Thinking

Generally, the discussions of critical thinking which have been offered to social studies practitioners as a basis for curriculum development have had two shortcomings: (1) They have been based on the notion that one model of thought is appropriate for the solution of all problems; and (2) They have been aimed only at the resolution of factual questions. An example of such a discussion--one which has gained wide acceptance among curriculum people--is Ennis' (1962) presentation of a "concept of critical thinking" from which the consideration of value questions has been explicitly excluded. Yet value choices are at the heart of ethical analysis.

Berlak (1965) has argued convincingly for "context-specific" models of critical thinking, noting that relevant concepts are likely to be overlooked unless the specific type of problem about which thinking is to take place is identified. His contentions are supported by a review of social studies textbooks. Discussions of critical, or reflective, thinking, when included in these books, are usually based on a notion of scientific method attributed to John Dewey, involving some five steps for information gathering and judging, and deemed to be adequate to the handling of the issues raised by societal controversy. Again, value choices are ignored (Shaver, 1965; 1967). The result is critical thinking schemata which are inappropriate to the demands of citizenship education.

The U.S.U. Social Studies Project

An exception to the above indictment is the work of the Harvard Social Studies Project (Oliver & Shaver, 1963; 1966). The report of that project dealt specifically with the need to consider value issues in making political-ethical decisions (Oliver & Shaver, 1966, Ch. 6 & 7). However, two criticisms of the Harvard Project product served as the basis for the U.S.U. Social Studies Project: (1) The critical thinking concepts presented in the Harvard Project report are not adequately inclusive or comprehensive for the analysis of public issues, nor sufficiently organized in a systematic framework to serve as a basis for instruction; (2) Materials and methods for teaching the concepts were not provided. It is worth noting that any attempt to lay out a framework of critical thinking (such as Ennis' [1962]), has to face the latter problem if it is to serve as the basis for instruction. Developing the means for teaching a framework for critical thinking is a long and laborious task.

The U.S.U. Social Studies Project was based on the recognition that the current state of curriculum development in social studies did not provide an adequate basis for teaching an analytic schema for thinking about public issues. Two assumptions about curriculum development underlay the project's work: (1) That social studies teachers, as burdened as they are with instructional loads, could not be expected to develop adequately inclusive and comprehensive critical thinking frameworks even in those instances where they felt, and in fact were, competent to do so; and (2) Given the facts of the current definition of the teacher's role, teachers do not have the time or resources to develop the materials and methods for teaching a complex schema of critical thinking.

The U.S.U. Social Studies Project, then, had as its major curricular objectives: (1) To develop a set of concepts* appropriate for the analysis of public issues, and (2) To develop materials and suggestions for teaching those concepts. The rest of Part I of this report describes the results of the project's curricular efforts--the concepts considered important in the analysis of public issues, an Outline of Concepts for the Analysis of Public Issues, and suggestions for teaching those concepts.

In addition, the U.S.U. Project had a definite research thrust. Although it appears clear that students who are taught critical thinking concepts will

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*Concept as we use it here has no special or technical meaning, and we do not care to become involved in arguments over what a concept is and whether we have indeed produced a set of concepts. A concept to us is an idea or notion which helps people to organize and deal with reality. Concepts are labeled and identified with words. Some concepts are given single word labels such as "dog." Other concepts require complex statements, e.g., "The individual and society are interdependent." Concepts can be broken down into subconcepts (e.g., the concept of "leg" is undoubtedly a subconcept in the concept of dog, and "individual", "society", and "interdependent" are obvious subconcepts in the broader statement, and each is undoubtedly based on other subconcepts). In addition, rather than distinguishing between concepts and generalizations, we consider concepts *to be* generalizations, in the sense that each concept pulls together and organizes other ideas. It is, of course important to distinguish between the concept--i.e., the idea--and the word which labels it. "Peace" is not a concept, but a word which stands for a concept or idea. Given these qualifications, we are, then, talking about developing a set of ideas useful in analyzing public issues.

score higher on tests geared to those concepts than will students who have not had the special instruction, little is known about the factors which make methods of instruction more or less effective with different students. The Harvard Project (Oliver & Shaver, 1963, Vol. II; 1966, Appendix) investigated the effects of two teaching styles--socratic and recitation--and the interactions of student personality with teaching style in affecting learning. The research efforts of the U.S.U. Social Studies Project were aimed at replicating at a different grade level and extending the findings of the Harvard Project. Part II of this report is devoted to the description of that part of the U.S.U. Project.

CHAPTER TWO

ANALYTIC CONCEPTS: PUBLIC ISSUES AS ETHICAL ISSUES

The content proposed by the U.S.U. Social Studies Project is different than that of the traditional social studies curriculum, and teachers who have cooperated in tryouts of the project's materials have agreed that teaching this particular course of study should be preceded by special orientation. Teachers could begin their orientation by reading the teaching materials and the Outline of Concepts for the Analysis of Public Issues upon which they are based. The Outline, however, is intended to be only a sketch rather than a thorough exposition and, although the materials focus on suggestions for teaching the content to students, they do not offer a detailed explanation of the concepts. The following chapters provide a comprehensive discussion of the concepts as background to the Outline and the materials which are presented later. In particular, these chapters detail the focus for thinking, referred to in Chapter 1, which underlies the project's curriculum development work.

Concept I: *The Nature of Decisions about Public Issues*

The concern of the U.S.U. social studies project has been with developing a curriculum to help students improve their thinking abilities. Thinking must take place in some context. It must have content and it usually stems from being faced with a problem, some perplexing state of affairs. As noted in the previous chapter, the U.S.U. Project has operated from the assumption that there is not a general mode of analysis applicable to all problems. Instead, it has seemed important to identify the category of issues with which we want students to deal more effectively, and then attempt to build a set of analytic concepts based on the intellectual demands of those issues. The citizenship education orientation of the project, which we attempted to make clear in the preceding chapter, led us to be interested in helping students to think more effectively about decisions on matters of policy facing the society and individuals in the society in attempting to confront the continuing problems created by and resolved within a multi-value, pluralistic, context. To provide focus, it seemed clear that our consideration of analytic concepts (and our attempt to organize those concepts in outline form) should begin with an explicit statement about the type of issues to which the concepts were intended to be applicable.

Perhaps it is unnecessary to emphasize our concern with *issues* as a vital part of social studies instruction. However, a look at the content of many social studies courses indicates that social studies teachers are often not oriented toward the consideration and debate of issues, even in American problems, or problems of democracy, courses. Such courses commonly deal with a variety of *topics,* some of which are presented as issues and some of which are not. And, some of the issues are public issues, and some are not. It is not uncommon for social studies courses to have students study the historical background and current status of the negro in America, or of the present national economic situation. However, the emphasis is frequently on the content describing such matters of concern to the society, presenting information to be learned and retained, but without using the information as a basis for considering appropriate policies for handling the problems. Such courses do not deal with issues, the central concern of the U.S.U. Project.

An issue is a matter under dispute, a point about which there is disagreement, a question which demands decision. Disputes arise over a variety of questions:

"Are mini-skirts too immodest to be worn in public?"

"Should we remodel our kitchen or buy a new pickup truck?"

"Should law enforcement be more strict?"

"Should middle-income families be taxed more heavily than the rich?"

"Should I buy a Cobra Mach I?"

"Is prayer in public schools constitutional?"

"Which is the best lawn fertilizer, ammonium nitrate, ammonium sulfate, or barnyard manure?"

"Should the United States have made commitments to the government of South Vietnam in 1962?"

It is obvious that all of these questions are not likely candidates for high school social studies courses. Vietnam, taxes, prayer in the schools, and law enforcement are certainly more fitting topics for the social studies curriculum than are the merits of sporty autos, lawn fertilizer, pickup trucks, and kitchen cabinets. Why? Because the former questions raise issues involving important values in the society and because the manner in which the issues are resolved has important implications for the type of society in which we will live. Although the choice between a pickup truck and a remodeled kitchen may be important to the family involved, and may even be a matter of neighborhood conversation, it is difficult to believe that anyone would argue that such a choice had such important implications for the individuals involved or for the society that the matter should be publicly aired and decided through the society's governmental processes. The concern of the social studies curriculum, as part of citizenship education, should be with educating students to make more rational decisions about public issues, and this has been the focal point of the U.S.U. Project.

In particular, we have centered on public issues which are *political-ethical* issues. Further examples of political-ethical issues might include:

"Should the United States Army require soldiers to attend classes for religious instruction?"

"Should a white person refuse to sell his home to a black person if his neighbors object?"

"Should people who object to capital punishment be excluded from juries in capital cases?"

"Should a person take part in an anti-war demonstration if he believes that the demonstration will lead to violence?"

"Should draft deferments be given to conscientious objectors who are atheists?"

"Should oil companies be required to pay damages when oil leakage from off-shore wells pollutes beaches?"

We have found it helpful initially to make a rough distinction between ethical and non-ethical questions. Examples of non-ethical questions related to the above political-ethical issues are:

"What portion of the American public supports mandatory religious instruction for soldiers?"

"What is the penalty for racial discrimination in selling real estate?"

"Will seating jurors who do not believe in capital punishment reduce the number of death penalties?"

"Can an atheist have acceptable moral grounds for objecting to war, or can such grounds come only from religious belief?"

"Did the oil companies adhere to the standards established by the federal government for off-shore drilling?"

Hopefully, the above examples will provide a broad sense of the distinction between questions which focus on political-ethical disputes and questions which do not.

Political-ethical (public) issues involve decisions about what the aims i.e., the goals, of our society should be and about the individual actions and governmental policies that should be used to attain the goals. The word "should," which appears twice in this definition, is related to the notion that public issues are *ethical* issues discussed and decided in a political context. *Ethical issues are serious questions as to proper aims or conduct.* Ethical claims are statements about how we ought to act. Non-ethical claims may be factual statements about what the world is like, about what is, was, or will be, rather than about what ought to have been or ought to be; or they may be claims about how to define a term or phrase. (These non-ethical claims will be discussed in detail later.) The distinction can be made more clear by re-examining a previously given example of related ethical and non-ethical questions:

Ethical question: "Should the United States Army require soldiers to attend classes in religious instruction?"

Non-ethical (factual) question: "What portion of the American public supports mandatory religious instruction for soldiers?"

We have said that public issues are political-ethical issues; that is, they center on ethical questions in a political context. However, this does not mean that non-ethical claims and questions are not relevant to settling public disputes. There are a number of non-ethical questions that can be legitimately raised when trying to decide whether soldiers ought to be forced to attend religious instruction. "Is such instruction constitutional? Does it violate freedom of religion, or the separation of church and state?" "Is the religious instruction nonsectarian?" "Have soldiers objected to this practice?" "What is the effect of religious instruction, i.e., does it produce better soldiers?" The answers to such questions can have a powerful effect on our answer to the ethical question.

Ethical questions, then, are queries about proper aims or actions. By the same token, ethical claims are assertions about what ought to be sought or done. Just as we might disagree with a factual claim (for example, that the population of the United States is one hundred and twenty million), we may disagree with ethical claims. Take the following ethical claims, for example:

> "World population should be controlled by planned infanticide."
>
> "Americans who give speeches against our involvement in Vietnam should lose their U.S. citizenship."
>
> "Coeducational public schools should be abolished, and school boys should be required to wear uniforms and crew cuts."

Although such statements are morally repugnant to many of us, they do make claims about what ought to be done. In that sense, and this is the way the term is used by the U.S.U. Project, they are ethical claims. Ethical claims, then, may advocate action or aims which we do not regard as nice, good, or moral; just as there can be true and untrue factual claims, we can have good and bad (i.e., meeting our approval and not meeting our approval) ethical claims. And, just as it is important to have intellectual criteria and procedures for deciding what factual claims to accept, it is important to have criteria and procedures for judging political-ethical claims.

As previously noted, the word "should" appears twice in our definition of "public issues," indicating that these issues involve two types or categories of ethical questions: (1) those about the aims or goals of our society, and (2) those about individual actions or governmental policies to be used to attain those goals. Examples of each type of question follow:

Goals of our society

> "Should we attempt to provide greater equality of opportunity for all races?"
>
> "Should we move toward greater international cooperation, perhaps even world government?"
>
> "Should we aim for complete separation of church and state?"

Governmental actions to attain the goals of our society

"Should racial discrimination be illegal in all types of real estate sales?"

"Should the United States have intervened unilaterally in the Dominican Republic?"

"Should property taxes be levied on church-owned real estate?"

Individual actions to attain the goals of our society

"Since there are blacks in the public school, should I send my daughters to private schools?"

"Should I donate part of my salary to UNICEF?"

"If ordered to lead my high school class in prayer at the beginning of each school day, should I refuse?"

The above examples illustrate that it is difficult to distinguish neatly between statements about the goals of our society and statements about actions to attain the goals. What is a means in one context becomes an end in another. By definition, only ultimate ends or goals are not also means. Ultimate ends, however, imply ultimate values. For reasons explained in a latter section on value disputes, appeal to ultimate, fixed, or final goals (except for vague values such as human dignity) is an unsatisfactory approach to analyzing public issues. We prefer simply to recognize that although the distinction between goals and actions is not neat, it is important for students to learn to identify and debate about the general values in our society, as well as the means to reach them.

Note also that we have included questions about individual actions as "public issues." This may seem odd to some people. After all, whether I decide to donate part of my salary to UNICEF is not a public matter. Or, is it? The existence of UNICEF, and of the United Nations, raises questions concerning the goals of our society, for example, "Should the United States relinquish part of its sovereignty to an international organization?" Whether individuals should support the United Nations might then become (and in fact has become) a matter for public debate. And where personal action has a direct impact on a problem (as, for example, in refusals by whites to sell houses to blacks), individual action is clearly a public concern (as expressed in public housing bills).

Identifying Public Issues

Obviously, the distinction between public and private matters is not always clear cut. This is due partly to a lack of a clear definition of the terms. One way of identifying public, political-ethical issues is to ask, "Has the issue been of public concern either in the past or present?" The assumption is that any matter which has been or is being publicly debated is a public issue. Looking for public debate is a useful rule of thumb. However, it fails us if goals for our society and the actions to implement them which have not had previous public examination should be of concern. In other words, it excludes novel proposals. Moreover, some matters are widely discussed--such as whether the American and National Baseball Leagues should split into divisions--even though they lack the significance to be political-ethical, and therefore public, issues.

Issues are sometimes also labeled "public" only when the agent for a past, occurring, or proposed action is a public institution such as an arm of the federal, state, or local government. Using this distinction, a question such as "Should John Harmon register to vote?" would be a private matter. For us, this distinction is inadequate because important goals of our society cannot be implemented through government action alone. Debate about how our country should resolve its important problems ought to include questions about the responsibility of individual citizens. In addition, many important issues involve non-government public institutions as agents. Obviously, the actions of businesses, churches, and other voluntary organizations help to establish the goals of our society and the extent to which we achieve those goals. Although there is strong precedent for considering questions such as "Should the Mormon Church allow negroes to hold the priesthood?" to be private matters properly of concern only to the church, we think it reasonable that such questions be considered public issues. That does not mean that we believe that the government should step in and take action, but rather that the issue involves a basic goal or value of our society, i.e., equality of opportunity.

We have already alluded to a third way of identifying public issues--that is, through what amounts to a feeling that some issues are inherently private as opposed to public. This distinction has to do with a sense of individualism and a concern for privacy. Inhibitions about the invasion of privacy go beyond the legal protection of privacy of person and possessions and are expressed in claims such as, "That's none of their damn business!" This reaction often occurs when questions are raised about our household budgets, careers, sex life, personal hygiene, the way we dress, and so on. If the government, non-government groups, or even certain individuals, try to plan our personal budgets, dictate career choices, or tell us how to brush our teeth, we take offense. Many people not only resist efforts to interfere with their behavior in these areas, but claim that such personal matters are not a proper topic for public debate.

We do not deny the moral legitimacy of this view, but do deny its adequacy in establishing which issues are private and which public. For instance, career choice in this country is considered to be a private matter and public agencies do not force people into specific professions. Nevertheless, the desirability of some professions--e.g., the military, education, social work--is manipulated by the government through the allocation of government funds for salaries, scholarships, research projects, and advertisements designed to increase the attractiveness of careers in these areas. The government also forces deferment of individual careers and makes some professions much more accessible than others through the application of Selective Service regulations. Similarly, whether women will be allowed to choose careers as jockeys, boxers, or combat soldiers could become the subject of public debate and policy decisions, just as at one time there was considerable debate over whether male physicians should be allowed to serve as midwives. As a general topic, then, career choice cannot be exclusively categorized as a private issue. The same is true of many other topics.

Although few if any topics are completely private matters, it can be argued with greater success that some issues are automatically public. We consider any actual or proposed government action to be a public issue, especially in a democracy where government is expected to be responsive to the citizens, who are also to participate actively. And, as we have pointed out, the actual or proposed action of non-government groups and individuals can raise public issues when they have an impact on the goals and general values of our society.

It should be clear from the above discussion that whether or not an issue is public or private is often a legitimate matter of debate. Care of one's lawn is usually considered to be a private matter; yet, some cities will fine homeowners for not keeping their lawns up "properly." Dress and hair styles are usually considered to be, if not entirely private matters, at least not proper topics for political-ethical classification. Yet, not surprisingly, many teenagers inform us that they consider the matter of dress to be a political-ethical issue in the context of the authority structure of the school as a governmental agency. The homeowner faced with a municipal regulation on lawns and the teenager faced with dress regulations may not want to discuss the merits of the regulations without settling the prior question of whether the governmental agency is interfering unduly in a private matter.

Seriousness as a Criterion

There is one further point which needs to be touched on briefly: that is, that part of the definition of political-ethical decisions which refers to the seriousness of the proposed government or individual action. With diligence, a person might relate nearly any human activity to the goals of our society and, therefore, argue for its inclusion into the curriculum of a public issues course. At this moment, one of the authors is smoking a pipe. Someone might claim that a healthy citizenry is, or ought to be, one of our societal goals. Therefore, whether I should smoke my pipe is a public issue. Even if this line of reasoning were accepted, and it is not completely without merit, we can probably agree that there are more serious problems facing the United States than the health of pipe smokers. These more serious topics ought to take precedence in the high school curriculum.

The seriousness of proposed government or non-government group action is an important consideration when deciding whether it should be included in the content of a course focusing on public issues. Decisions about trivia are usually not considered to involve ethical questions. By the same token, the social studies curriculum has heavy demands on it, and serious matters should be given our sustained attention (trivia may serve as pleasant diversions). The Salt Lake Tribune, April 10, 1969, carried a front page account of a proposed mass demonstration against pay toilets in the California State Capitol. Although the proposed P.P.P.P.--Pay Pottie Protest Parade--involves a decision by a public agency, and is therefore a public issue, it is certainly not as important as two other events reported on the same page of the newspaper--

the demonstrations against ROTC at Harvard University and the policies of the Nixon administration toward equal employment opportunity. Or is it? At any rate, the seriousness of a proposed act, as well as whether the act is an invasion of privacy, ought to be considered in defining and selecting public issues.

Summary

Public issues are political-ethical disputes--questions of ought, or should, or right--about the goals of our society and actions taken to attain those goals, usually in a governmental context. Although public issues focus on ethical questions or claims, other types of claims and questions are relevant. Disputes over government policy are automatically public issues. Disputes over non-government group action or acts of individuals can be either public or private, depending on such factors as their relation to the general goals of our society and whether public debate of the act would unjustifiably violate right of privacy. Selection of public issues for the school curriculum should also take into account the seriousness of the disputed act or policy.

CHAPTER THREE

ANALYTIC CONCEPTS: THE NEED FOR ORDER

In considering concepts that might be helpful in making decisions about public issues, one reasonable place to begin is by asking, "How do disputes arise?" "Why do people disagree?" and "Why are their disagreements often so difficult to settle?" Final or complete answers to these questions are not easy to come by, but we can gain some insight into the process of making political-ethical decisions by considering the general need for orderliness which people have and how that need affects what we see (perceive), what we believe, and the strength of our beliefs (our desire to continue believing).

When we speak of our general need for orderliness, we do not mean a compulsion for being tidy. We are not speaking of a desire to empty ash trays, to wash the dishes immediately after eating, or to see that the paper clips are always kept in their proper place. We refer rather to the fact that individuals select stimuli to which they will attend, they interpret those stimuli and relate them to their existing beliefs, attempting to maintain consistency among those beliefs.

Selecting and Ordering Stimuli

Think of a typical situation. One of the authors sits in his office preparing a draft of this chapter:

> I cannot pay attention to all that is going on about me at this moment. My electric typewriter is humming. There's an unspecifiable sensation where the tops of my cowboy boots touch my leg. Cars are going by on the highway outside my window. The secretary is talking to someone on the phone. Children's voices are coming from the direction of the College of Family Life nursery next door. Various colors are before my eyes: yellow paper, grey desk and green-grey typewriter, white walls, "pink" hands on the typewriter, speckled brown floor. A maze of objects is scattered about the room. Out of the corners of my eyes I see a pocket dictionary, scissors, ballpoint pen, travel luggage, and a newspaper. There is the smell of the cigar I am smoking, the odor of stencil correction fluid; the aroma of my secretary's perfume and my shaving lotion. In the midst of this profusion of available sensation, I am trying to think and write.

Obviously, one cannot notice all of the available sights, sounds, smells, and feelings. When he focuses on some, he is oblivious or only vaguely aware of others. A child watching T.V. does not hear his parent's call. Lovers strolling through a park have eyes only for each other. A cat conditioned to respond to a bell gives no indication that he hears the bell when shown a mouse. A father rushing his child to the hospital is surprised to learn that he left the house without his shoes and, upon reaching the hospital, left his parked car without turning off the engine or setting the hand brake. People unconsciously select and attend to only a small portion of the available stimuli. In some cases, the selection is determined by a special circumstance;

but even in ordinary settings it is impossible to pay attention to everything.

Selective attention is a necessity, but it is only part of the story. Not only do people unconsciously attend to only part of their surroundings, but different people see or hear (attend to) different things in the same setting. A person who grew up in Utah and is strolling through a wooded section of rural Missouri has a different experience than a companion from Massachusetts. The Westerner is accustomed to majestic views, e.g., open spaces bounded by rugged mountains. He finds beauty in space and far away scenes. The Easterner is accustomed to closer quarters in nature. He finds beauty in the shape of a leaf, the coloring of a specific bird, the meanderings of a small creek. On their stroll, then, the Utahn gravitates towards the tops of hills to "see the view," and towards the center of large clearings. He misses, or is simply uninterested in, the variety of natural details that entrances his friend. In the same setting, the two men see different worlds.

Not only do people see different parts of the same setting, they interpret differently what they see, or hear, or smell. A home is being remodeled and the bathroom plumbing has been partly removed. The husband-remodeler takes out a sink and fails to seal the drain leading to the septic tank, allowing a slight, but disagreeable odor to seep into the basement. His wife, having just read of the death of four people from a gas leak in a faulty furnace, enters the basement, smells the odor, and announces that the furnace is leaking. A plumber friend smells the odor and recognizes its origin in the septic tank. People with different backgrounds and experiences have placed different interpretations on the same experience. In slightly more technical terms, they came to the experience with different *perceptual sets*. Each was inclined to perceive differently what he smelled.

A story from *The Forest People* (Turnbull, 1962), illustrates the same point. An anthropologist, who has been living with the B'mbutu pygmies of the Ituri rain forest, takes one of his small friends out of the forest and into a section of great plains. This is a new experience for the pygmie who has spent his entire life in a world where huge trees, closely spaced, blot out the sky and reduce the environment to the near-at-hand. The two men, riding in a jeep through a game preserve, spot a herd of rhinocerous in the distance. At first the pygmie comments on the strange bugs and refuses to believe his friend's explanation that the "bugs" are large animals which only seem small because they are far away. As they approach the herd, and the "bugs" begin to grow out of all proportion to the pygmie's notion of reality, the small man begins to panic and is convinced that he is the victim of some fearful magic. Needless to say, his prior experiences in the dense forest have not prepared him with the perceptual sets necessary to interpret distant objects.

Our interpretation of experience is also influenced by *feeling predispositions,* which are tendencies to have positive or negative feelings toward what we perceive. These feelings might be towards individuals, nations, religious groups, particular newspapers, magazines, and so on. Our feeling predispositions partly determine what we are willing to read, who we are willing to listen to, and what we will believe. For example:

> A radical black student is brought to trial in a university town in a semi-rural area of Utah. He, and two black co-defendants,

are convicted of disturbing a public meeting sponsored by a local conservative political group. After their conviction, the university student newspaper publishes an article claiming that an impartial jury trial for a bearded black radical is impossible in this community because of the anti-negro posture of the Mormon Church, and because of the conservative political beliefs of the local population.

The author of the article thinks that people in this valley have a negative *feeling predisposition* towards both blacks and radicals, and that these biases influenced the jury's judgment of evidence presented by the defense. It is also possible, of course, that the student author's negative feelings toward the townspeople influenced his willingness to believe that they rendered an unfair judgment.

Consider your own feeling predispositions. When conflicting accounts are given of casualties suffered during an Israeli and Egyptian border clash, are you inclined to believe the Arab or the Israeli estimate? When scanning the editorial page of your newspaper, are there some columnists whom you deliberately avoid? If speeches were given in favor of continuing the Job Corps, or of establishing an anti-ballistics missile system, would you tend to listen more carefully to Hubert Humphrey or Richard Nixon?

Our feeling predispositions and perceptual sets are based on experience, and are frequently well founded and helpful. We may have good reason for believing that one person, or group, or news commentator, is a more accurate source of information or a wiser source of advice than another. Just as we cannot attend to all stimuli, and must develop perceptual sets to help us make sense of our experience, neither can we personally investigate every important question, read all that has been published on a topic, or listen to every opinion. Some guidelines, tendencies towards belief or disbelief, must be developed. Our perceptual sets and feelings predispositions can, therefore, be useful. But they also can interfere with rational judgment; especially if they cause us to ignore, avoid, or misconstrue important information, that is, to misperceive reality.

Mistakes based on perceptual sets and feeling predispositions are common. Two men are watching a daytime T.V. show in which the contestants are married couples. The husband in one couple is tall, ebony, and handsome; a well dressed, reserved young black man. His wife is caucasion; a beautiful and exuberant brunette who showers her husband with affection whenever they win a point. After watching the show for awhile, one of the viewers turns to the other and says, "My, that's a light skinned negro woman!" Someone has made a mistake. Has one viewer, a self-styled liberal, seen a mixed couple on T.V. when in fact there was none? Or has his more conservative friend allowed his desire for racial purity to affect his judgment of the woman's color?

Additional examples are plentiful:

> A young girl develops a favorable set towards hippies. She sees them as flower children; non-violent seekers of truth. She runs away from home to live with the beautiful people and is found a short time later, raped and murdered.

A squad of young recruits is assigned to guard a group of South Vietnamese being transported by air. The soldiers, whose experience has caused them to believe that they were dealing with Viet Cong, kick their prisoners, spit on them, and threaten to throw them from the plane. Upon arrival they find that the objects of their abuse are "friendly" Vietnamese being relocated in a new village.

In several of the examples we have given of unusual behavior related to perceptual sets and feeling predispositions, the people involved were frightened or threatened or deeply committed to some person or cause. In such situations, what we perceive or feel is particularly likely to be selected or biased by our needs and desires. Some Americans believe that the United States was never an aggressor nation, even during our period of "manifest destiny." Many are committed to the notion that our Constitution was "inspired of God," and assume that our leaders are always just and humanitarian, and that our national policies are always determined by lofty ideals. These people tend not to believe, therefore, that a weather reconnaisance plane reported lost on a routine mission is instead a spy plane which deliberately invaded the U.S.S.R.'s airspace, that the C.I.A. helped overthrow the government of Iran, that our policy in the Middle East is largely dictated by the profit motives of great oil corporations, or that foreign aid has been used to perpetuate a police state in Formosa. Other peoples, of course, have other commitments which influence their view of the United States. For some of them, every move on our part is proof of Wall Street's influence. Our differing commitments, developed from different experiences, cause different interpretations of important events.

We should be aware of our own commitments, and wary of our biases, as well as those of others. Earlier we asked whether you would tend to believe Israeli or Egyptian accounts of a border skirmish. Both the Israelis and the Egyptians are deeply committed to their cause. Moreover, the individuals who observed the skirmish, whether civilian reporters or in the military, were in a tense, threatening situation, and this may well have affected their perceptions. The existence of threat and commitment might also help to explain inflated reports of Viet Cong killed by American soldiers, conflicting accounts of police brutality, disputes over the number of snipers present during race riots, and charges and counter charges of racism when whites and blacks oppose each other in political campaigns.

There is some overlap between the effects of perceptual sets and feeling predispositions in the examples we have given. This is partly explained by our deliberate extension of the psychologists' definition of "perceptual set", which refers to the automatic, mechanistic, and uncontrollable interpretation of stimuli. This limited use of the term can be illustrated in the types of optical illusions which occasionally appear as puzzlers in the comic pages of newspapers or in childrens' magazines. It is also illustrated by the pygmy who thought the distant rhinocerous were bugs.

We use the term more loosely to refer to expectations as to what will be sensed. In previous examples, when the T.V. viewer said, "My, that's a light skinned negro woman!" or the American soldiers who mistreated their charges whom they thought were Viet Cong, we claimed that they might be acting on the basis of their perceptual sets. It is obvious that our extended use of the term in these examples blends into our use of "feeling predispositions", in that the persons' sets were shaped by their attitudes.

It is important for the research psychologist to narrowly define the object of his inquiry, i.e., visual perceptual sets, so that the results of his experiments will not be generalized to inappropriate settings. For us, it is more important to have a word which will serve as a general reference for the ways in which people receive *and* interpret information about their environment. A narrower definition would only result in unnecessary multiplication of terms.

Frame of Reference

Our use of *perceptual sets* and *feeling predispositions* is similar, but not identical, to what some people call "frame of reference". For us, *frame of reference* is a broad term which encompasses beliefs and values as well as sets and predispositions. In general, the individual's frame of reference includes his beliefs concerning what the world is like and what is possible, as well as what is desirable. For example, the atheist and the religious believer have different frames of reference regarding what is real and what is possible. One contends that the apparent here and now is all there is; that life is a natural phenomena explainable in mechanistic terms; that there is no future beyond death; that man--a solitary race--must look to himself for direction. The other claims that life is eternal; that man is more than a machine or an animal, more than physical parts and their connection, more than flesh and bones and chemical combinations; that there is an omnipotent and benevolent Being who watches over and inspires man. The atheist and the believer also differ in their values, i.e., their notions of what is desirable, of what ought to be. Since one contends that man is mortal, he locates the good in this life; he emphasizes the alleviation of present suffering and hopes to increase present joy, happiness and pleasure. The other's vision has a dual focus, but his ultimate goal is to be found in the eternal rather than the present, and in the spiritual rather than the physical. We can, therefore, expect them to occasionally disagree on public issues.

We could multiply examples. Black Americans, as a group, have different experiences than white Americans. Their general frames of reference thus differ--although they are also similar in some respects. The same is true of black southerners and black northerners, military officers and enlisted men, truck drivers and medical doctors, farmers and industrial workers, college students and administrators, news reporters and politicians.

The above examples represent stereotypes. Nevertheless, classifying people according to their general frames of reference can be justified if done with caution. Groups of people do have similar general outlooks, because like people group together and because the influence of the groups and of other common environmental factors causes people to be alike.

When considering public issues, it is useful to take into account the differing frames of reference of various groups. It helps us to understand why disputes arise and to overcome the tendency to see problems only from our own perspective. Predicting the frames of reference of other people on the basis of group membership can be dysfunctional, of course, if we forget that each person has a unique background of experience, and therefore has some unique aspects to his frame of reference. An individual's total view of the world will be similar, but never identical, to that of another.

Assumptions

We previously noted that people have a general need for orderliness; that they select stimuli to which they will attend, interpret those stimuli, relate them to their existing beliefs, and attempt to maintain consistency among those beliefs. *Assumptions,* in the sense of beliefs or values taken for granted, often without being stated, are an important and unavoidable element in this ordering process. They underlie our perceptual sets and feeling predispositions. Without them, perception would be impossible. For instance, if we did not assume that objects look smaller at a distance, we would not perceive depth and we would misperceive size. If we did not anticipate patterns of sound, based on assumptions concerning the language being spoken, speech would be a meaningless jumble of noise.

Of course, many of the beliefs and values in our frame of reference are assumptions, too. Action on social problems would be impossible without assumptions, because we do not have the time or ability to validate all the beliefs and values which underlie our decisions. There are times, however, when unexamined assumptions hinder rational decision-making--as the following examples illustrate.

The National Highway Safety Bureau reported in a recent newspaper article that fatalities or serious injuries occur in 9.6 percent of the accidents involving foreign compacts. The rate for American made cars is 3.1, 4, 5.2, and 6.4 percent for automobiles weighing 4,800 pounds, 3,700 pounds, 3,400 pounds, and 2,800 pounds. Without challenging the claim that more people are killed or seriously injured in accidents involving small foreign cars, Volkswagen of America points out that the conclusion that foreign cars are more dangerous is based on the unexamined assumption that all automobiles are used in similar circumstances. They claim that foreign cars are most often driven by young people, who drive more miles at higher speeds and during more dangerous hours of the day than do older people. Volkswagen also points out that their products have passed all U.S. government safety regulations. Of course this last argument is not very powerful unless we assume that the government regulations are stringent and that cars must be safe in order to pass them.

The need to examine key assumptions is also illustrated in a decision by the Canadian government regarding wolves. Between 1930 and 1963, the Canadian caribou population dropped from about 4,000,000 to less than 170,000 animals. During the late 1950's, pressure began to mount on the Dominion Wildlife Service to exterminate the barren land wolf which, it was thought, was responsible for slaughtering thousands of caribou annually. Prior to the adoption of an extermination policy, Farley Mowat--a government biologist--was sent to study the wolves first hand. As a result of his investigation, Mowat (1965) published a small book, *Never Cry Wolf,* which challenged several assumptions concerning wolves and their relation to caribou.

Many people assume that wolves are bloodthirsty killers. On the contrary, Mowat claims to have been very close to wolves on numerous occasions without being molested. He set up camp within a few feet of a path which was used daily by several wolves; accidentally stumbled into a family of pups when the mother was watching; crawled into what he thought was an empty den only to find it occupied; and on several occasions chased wolves away from freshly killed caribou in order to examine the carcasses. Contrary to common belief, Mowat claims that wolves do not kill for pleasure, do not kill more than they can eat, and eat all that they kill, including bone marrow and skull contents.

It is also believed that wolves subsist mostly on large game animals. An examination of wolf scats (feces) which Mowat collected over a large area during a period of several months revealed that the wolf's primary diet is field mice. The wolf hunts large game only during the coldest months when mice are not available, and even then kills mostly sick or disabled animals. Despite legends concerning the wolf's ferocity and prowess, Mowat claims that a healthy caribou fawn can easily outrun a wolf. Wolves know this and make no serious effort to kill healthy animals unless food is scarce. Since they kill only the weaker animals, wolves act as agents of natural selection and help check the spread of disease and physical abnormalities among the herds.

Contrary to common assumption, the caribou appeared to have been depleted by trappers and hunters. Unlike the wolf, trappers kill healthy animals for food for themselves and their sled dogs. And hunters kill prize specimens for trophies.

Despite Mowat's findings, the bounty on wolves was increased shortly after his study was completed. Additional government Predator Control Officers were also hired to set out poison bait stations in the Keewatin Barrens. The usual assumptions concerning wolves prevailed.*

Inconsistency Among Beliefs

Why would the Canadian government send one of its men to study the habits of wolves and then establish policies inconsistent with his findings? They might have had a number of good reasons. On the basis of Mowat's report, they might have considered him to be incompetent or exceptionally biased; they might have had contradictory evidence from other competent observers; or they might have accepted Mowat's findings, but disagreed with his conclusions based on those findings. On the other hand, perhaps the government succumbed to political pressure brought to bear by sportsmen and trappers, or were unwilling to credit a report which flew in the face of long cherished belief.

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*Common beliefs about wolves are reflected in the story of "Lobo", in *Wild Animals I Have Known*, by Ernest Seton-Thompson (1966). The reader might also want to compare Mowat's account with *A Naturalist in Alaska*, by Adolph Murie (1963). These three books can be profitably compared for differences in perceptual sets, feeling predispositions, general frames of reference, and bias. They also illustrate other concepts relevant to factual claims, such as the consistency of independent accounts, the difference between eye-witness and second-hand reports, and the importance of identifying sources of information. Differences in emotive loading of language in the three books is also apparent.

Unwillingness or inability to accept information which contradicts present belief is not limited to Canadians, nor is it limited to bureaucrats. It is a trait found in all of us, and can be explained by our need for orderliness. Each of us, to a large extent, builds his own world. By selectively attending to information, interpreting that information, and relating it to what we already believe, we build and modify our frame of reference.

We each have a strong need or desire for consistency among the beliefs that make up our frame of reference. The strength of this need is illustrated by the discomfort felt when our beliefs are found to be inconsistent. Husbands don't like to be told that they have changed their story--especially by their wives, and especially by their wives when others are listening. College freshmen suffer agonies when the inconsistencies of long cherished religious beliefs are made evident in introductory philosophy courses. The pro-Viet Cong war protester squirms uneasily when he hears of atrocities committed by communist troops. A middle-class businessman is mortified when he sees his hippie son violate values which the family has been proud of for generations--competition, respectable occupation, thrift, upward striving, and even cleanliness. The hippie in turn is sickened at the inconsistency between his father's business practices and those non-aggressive Christian values--turn the other cheek, do good to those who despitefully use you, go the extra mile, love your enemy--propounded in church.

Handling Inconsistency

People try to handle inconsistencies among their beliefs, values, and actions in a number of ways. Some of these ways are rational and some not. One of the least rational is to actively avoid situations and information which are contrary to what we believe or contrary to actions we have taken. We have already mentioned examples of avoidance in illustrating feeling predispositions. The following cases are similar. The newspaper announces that Secretary of Defense Laird will appear on a Sunday public affairs television program to explain the defense policies of the Nixon administration. The person reading the paper, however, is opposed to several of those policies, particularly the deployment of a limited antiballistic missile system. Furthermore, he knows that Laird is a brilliant man who will present persuasive evidence favoring the ABM. To avoid the discomfort of being told that he is wrong, the newsreader refuses (neglects) to watch the announced program. Another common example is the person who breaks off discussion of a controversial issue by saying, "Look, I know that I won't agree with whatever you're going to say, so we might as well not even talk about it."

Another irrational way of handling inconsistencies among beliefs, values, and actions is to reduce the importance of the contradictory situation, information, or source of information. A husband, who believes that marriage and family are important, excuses his affair with another woman by claiming that she or it really didn't mean anything to him. The faithful wife who believes that her spouse is a paragon of virtue, refuses to believe stories about his misbehavior. She claims that the tale bearer is jealous of their happy marriage. The guilty feeling parent who has severely beaten his child reduces the importance of the act: "I didn't hit him that hard!" or, "He wouldn't have been hit in the head if he hadn't ducked!" or, "I didn't mean to knock him down. He really stumbled when he tried to run away."

Not every attempt to reduce the importance of the inconsistency is irrational. Some inconsistent acts are not important; some sources of information are not trustworthy; and in some instances a violated value is not as important as a value supported by the act. This brings us to a major point: *It is often difficult, if not impossible, to avoid inconsistent behavior from one situation to another, because most decisions and actions have both positive and negative elements.** Suppose that a person believes that it is important to spend more money on improving the lot of the American poor. He also believes that it is necessary for the United States to maintain a strong defense posture. However, the federal budget is not unlimited. The *desired* allotments for both guns and butter are not available. A decision must be made to reduce either military or domestic expenditures, perhaps both. No matter what choice is made some important value will be violated and there will be some grounds for charging the policy maker with inconsistency of belief and action. Since this type of inconsistency is unavoidable, it is not necessarily a sign of irrationality. In fact, the rational person will recognize that he can not always have his cake and eat it too, that hard choices must be made, and that in some cases important values will have to be violated in order to achieve even more important goals.

Compartmentalization, a common irrational way of handling inconsistency, occurs when a person does not admit the relevance of contradictory knowledge or values. Fraternity members are noted for "pranks" played on rival houses: A horse is stolen, led into the enemies' dorm, and slain in a second story bathroom; a beauty queen is kidnapped on the night of the rival's big dance; trophies are stolen, property is defaced, and automobiles are sabotaged. This illegal and destructive behavior causes little discomfort to the offending parties. Even though breaking and entering, grand larceny, and kidnapping might be unthinkable to a young college student during his out-of-school life, he is not bothered by these same acts when committed in the company of his "brothers" against their competitors. The main stream of his life flows securely in one compartment, its boundaries formed by the common values and beliefs of our society. His fraternity life is in a separate watertight container, bounded by a different set of rules. That the two streams of belief are inconsistent, or that the inconsistency is important, is not recognized, and so, of course, not admitted. Adults compartmentalize between those things they will say and do and believe on Sunday and those things that occur Saturday night at the club or Monday noon at the office. The military pilot who petitions the mercy of a universal Father without reference to the completed or upcoming mission to napalm a peasant village might very well be compartmentalizing, though not necessarily so.

It is our belief--in fact one of the basic assumptions underlying not just the U.S.U. Project, but our approach to social studies--that decisions about public issues will be more realistic if inconsistent elements are handled rationally. This can be done by facing the inconsistency openly (Is *honestly* a better word?) and weighing the reasons for the inconsistency. If necessary or prudent, the inconsistency can either be accepted or we can change our beliefs, values, or actions to achieve greater consistency. Such an open approach at least provides the opportunity for important issues to be resolved through the application of intellect, both our's and others'. The alternatives--denial, avoidance, and compartmentalization--eliminate or severely restrict the application of our rational faculties and entrench present commitments on important matters, making disagreement among people a matter of emotion rather than reasoned position.

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* *Opportunity Cost* is the term economists apply to one particular type of this general problem.

CHAPTER FOUR

ANALYTIC CONCEPTS: THE NATURE AND IMPORTANCE OF LANGUAGE

Of what relevance is language to the analysis of public issues? Try to imagine debate about public issues without language. Try to think of an issue without using words. Public policy is proclaimed in the language of legislative bills, court decisions, and administrative rulings. Religious encyclicals, statements of corporate decisions, and speeches by activists create issues. Issues are discussed on television, in newspapers and magazines, and over the radio. They are debated in Congress, defended in presidential press conferences, and argued in barber shops, pool halls, book clubs, and Sunday School. All of this activity requires complex communication via language.

Language, then, *is of central importance to the analysis of public issues because it provides the basic means for thinking and communicating about them.* It is true that a good deal of information is communicated without language--at least without verbal language. Mites, so small that several live in the ear of a moth, communicate their presence and sex to other mites; bees pinpoint for other bees the location of distant nectar by running patterns inside the hive; and, as many dog owners are painfully aware, a bitch in heat broadcasts her condition to every male within travelling distance. People also communicate without language: Perfume attracts and arouses (according to the ads); cars and clothes tell us something about the man; a touch, a sign, a lifted eyebrow, or a scowl have meaning for the right observer. However, lovers can flirt with their eyes or knees, but mapping their future requires a different plane of communication. Scowls from the audience warn a lecturing Congressman that his arguments are not well received, but not why. And, a widow's armband protests eloquently the needless death of her miner husband, but cannot detail the contents of desired safety regulations. In short, signs cannot handle complex disputes over public matters.

The life of Helen Keller dramatically illustrates that language is important to both thought and communication. At one time she was considered by some to be retarded, primarily because she acted more like a witless animal than a gifted child capable of maturing into a brilliant and cultured woman. Blind, deaf, dumb, untutored, unable either to speak or think in a language, she was restricted in many human qualities, including her potential for intelligent and creative thought. Her experience illustrates that language is more than a mere tool, more than a useful object to be picked up, used, and set aside when not needed. It is part of the human condition, part of what man is. Without language, man is not only less able, he is less human.

In her biography (Harrity and Martin, 1962), there is no Helen Keller in early childhood--in the years before words--only a phantom moving in shadows. This phantom--not a child, but the makings of a child--has not experienced what Emile Durkheim called "the education of morals." Since she cannot communicate, her behavior is not shaped by others. Unsocialized, uncontrolled, nearly uncontrollable, she knows neither approval nor condemnation, affection nor rebuff. She is innocent of right or wrong, ignorant of good and evil. Her affections are restricted to a crude drive--perhaps desire--and a generalized rage when desire is thwarted. Her mind is undeveloped. How do you think without words? Although her parents want to believe that she is intelligent, they have no way of finding out. How do you judge the existence or quality of thoughts through a screen of silence? Even memory is affected by the absence of language. In later life, childhood recollections come not in words and sentences, nor in images of things seen and heard, for there were none, but in vibrations of footsteps across a room and the press of fingers on her arm. Nowhere in early memory is there a soft word or an affectionate phrase, not because she was unloved, but because she was locked within herself without language.

Of course, Miss Keller's plight was more serious than ours would be if we could not speak, read, or write--for we at least can see and hear. But the power of language is still evident in her development after her teacher arrived. The first word she learned was "water," which was spelled into her hand and associated with the cool liquid flowing from a faucet. After that, she quickly discovered that everything has a name and began to add other nouns to her vocabulary. She slowly acquired verbs, adjectives, and other abstract parts of speech, and eventually learned to think and speak in sentences. At the same time, she began to change from a pre-person, whose growth in essential human attributes was not only stunted but perhaps even regressing, into a mature, educated, and refined woman.

Further illustration of the impact of language on thought is provided by the writings of Benjamin Lee Whorf (1956). We have discussed man's need for orderliness--that he selectively attends to stimuli, interprets them, relates information to his present beliefs, and attempts to maintain consistency among them. Whorf claimed that human language partly answers that need; that language gives man a logical structure from which to interpret his experience and structure his beliefs. From his work in comparative linguistics, Whorf concluded that reality is relative, that not every observer is led by the same evidence to the same picture of what the world is like. Of course, that is nothing new--we are already aware of the influence of perceptual sets and frames of reference. What is new is Whorf's claim that many of our sets are inherent in the language we speak. Different languages categorize reality differently and people who speak those languages thus have different notions of "what's out there." If Whorf is correct, there is a close relationship between human language and human thinking. To some extent the language we speak shapes our innermost thoughts.

We have attempted to stress the importance of language to communication and thought because it is easy to underestimate its influence. Language can be compared to the air we breathe; it is so much a part of us that we take it for granted, failing to recognize its worth and power.

Some appreciation of human language can be gained by comparing it to the means of communication among other living things.

Communication is a continuum which reaches its highest development in complexity and manipulativeness in human language and has its beginnings in the sensitivity of simple life forms to their surroundings. Single-celled microscopic animals respond to light, are sensitive to chemical change in their surroundings, can locate food, and recoil from danger. Even plants are not insensate. Flowers bloom and close from day to night and turn toward the sun as it rises, passes overhead, and disappears. Sensitivity is essential to life. Roots must grow down, and branches must grow upward. Their development cannot be haphazard. For survival, leaves must find sunlight and air, roots must find rich soil and water. To do so, some parts of the plant must be sensitive to heat and light, others to moisture and chemicals.

Ability to respond to environment is even more crucial and more complex among mobile animals. Unlike a plant, a bird or a flying insect must search for food in an area vastly larger than itself. For them, crude and generalized sensitivity is not sufficient. Earthworms do no more with light than detect and withdraw from it, but frogs must use light to see flying bugs in order to survive. For some simple forms of life, a generalized awareness of vibration is enough, but that will not do for bats who use a highly sensitive sound system to intercept mid-air meals or to dodge objects in their flight path.

At some point on the continuum, sensitivity to a mute environment is transcended and transformed into communication. That point, however, is difficult to determine. If we define *communication* as ". . .the giving off by one individual of some chemical or physical signal, that on being received by another, influences its behavior" (Frings and Frings, 1964, p.3), then even the smallest and simplest animals communicate. For instance, Protozoa announce their presence to others of their kind by emitting a chemical into the water around them. We hesitate however, to call such simple stimulus-response arrangements "communication," partly because they do not differ greatly from a plant or animal's reaction to its inanimate surroundings. Have a flower and a bee communicated when one attracts the other by giving off a distinguishing fragrance? Do man and mosquito communicate when one locates the other through his body heat? Although there is no clear cut and dramatic point that marks the beginning of communication, we use the word to refer to situations in which messages pass both ways. It is obvious that living things receive information from, or share information with, other living things. With simple life-forms, the information is simple and we speak of communication with some misgivings. As we move up the evolutionary ladder and scan the complex interchanges of "higher" animals, these misgivings fade and finally disappear.

Sensitivity to surroundings is essential to all life forms and communication is equally as important to many. With communication, ability to know what's "out there" expands beyond the immediate experience of a solitary creature; social cooperation and division of labor are possible; the search for food over vast territory is shared; the presence of danger is known before it is imminent; and important learned behavior passes from parent to offspring. In many cases, language functions to preserve the lives of individual animals and the species to which they belong.

Man is especially dependent on his ability to communicate. Primarily a social animal, he is unsuited to a solitary existence. Human society is marked by specialization, division of labor, and a high degree of interdependence among individuals within the community. Of necessity, man cooperates with his fellows by obtaining food and shelter, establishing and defending territorial boundaries, and raising and training his offspring. In this regard, he is not alone. Other social animals--ants and bees, for instance--fill specialized roles in complex social systems which require cooperation and communication. Unlike other social animals, however, man's specialization is learned rather than inherent. At birth, and for many years thereafter, he is fitted to no useful role in the economy of the community. Unlike bees or ants, he does not automatically acquire the specific behavior for the role he will play in maturity. He must learn what he will be. This can be an advantage. Since his behavior is not stamped in his being, man is adaptable, his society is flexible, and he can change to meet a changing environment and satisfy his shifting desires. However, since man, more than any other animal, lacks essential inherent behavior, he must have an efficient communication system for acquiring and sharing information.

The Nature of Words

In the preceding paragraphs, we have attributed great importance to human language. Now let us turn to the examination of what language is and how it works.

One of the important initial discoveries for Helen Keller was that *words are symbols which stand for other things*. We must add that *there is little, if any, natural or intrinsic relationship between a word and that for which it stands*. In somewhat technical language, we can speak of signs, symptons, and symbols. A sign is anything that stands for something else, a sympton is a natural sign, and a symbol is an artificial sign. Symptoms are naturally related to their referents. For instance, smoke--the real thing, not the word--is a symptom of fire. By the same token, the word *fire* is a symbol which stands for the condition of burning. However, the smoke and the word *fire* differ in important ways. The smoke is a natural result of burning; the term *fire* is an arbitrary convention adopted to refer to the physical condition. By mutual agreement, we could redefine *fire* to mean something entirely different and communication would not be impaired as long as we and others agreed on the new meaning and remembered to use the term that way. However, we cannot similarly redefine the meaning of the sight of smoke. For example, if we said that from now on the sight of smoke will mean that no fire exists, there would be no noticeable change in the behavior of fires--they would still put forth smoke. In other words, the meaning of symptoms cannot be changed through definition, the meaning of symbols can, and are. This has important implications for the analysis of public issues because disputes over language usage often need to be recognized and settled in considering policy. Resolution of these disputes is facilitated if we accept the idea that words are artificial signs that have no real, fixed, inherent, or natural meaning. That is, handling such disputes is facilitated if we recognize the flexibility of language and attempt to arrive at the most useful definitions rather than insist on some "true" meaning.

Functions of Language

One of the functions of language is to transfer information between individuals who are spatially separated. This ability is strikingly evident in certain animals. Some female moths emit an odor which attracts males up to five miles distant; frogs and toads croak in unison, apparently to increase the volume and carrying power of their song; certain fireflies blink and flash together, apparently for the same reason. Man, however, with technological extensions of his language, can communicate with others who are thousands of miles away--far outstripping any other animal.

The ability to transmit messages across time is another valuable function of language which is rarely present in animals other than man. In this regard, a species of solitary hornets is exceptional. The adult female lays her eggs in a celled nest and then dies. As the larva mature, they eat their way through the walls adjoining cells and escape. Since individual hornets do not mature simultaneously, this procedure could endanger the lives of larva which are still in their cells. The mother forestalls this problem by marking an escape route which takes each new hornet safely past his sleeping brothers. Thus, though dead, the mother leaves a message for her young. Again, animals' ability to transcend time does not approach the same ability in man. Our mammoth libraries, thriving publishing industry, storage banks of movie film and video tapes, plus treasured letters from departed friends and relatives, attest to the superiority of human communication in this respect.

We may marvel at the complex communication systems of some animals; the variety of information contained in the dances of honey bees, for instance. But, a single page of a scientific journal--perhaps even a single sentence--contains much more complicated messages. By comparison, variety and complexity are so evident in human language that we tend to overlook the origins of our communication in other animals. Perhaps language is a little too apparent, or at least too common. Our familiarity and facility with words cause us to take them for granted. In doing so, we fail to recognize how they shape our behavior, especially how they facilitate or impede rational consideration of important questions.

Two Types of Meaning

Understanding the role of language in controversial issues requires some grasp of two types of meaning. *Words and other signs can have descriptive meaning, emotive meaning, or both. Descriptive meaning refers to the information provided by a word, a group of words, or some other sign. Emotive meaning refers to the feelings aroused by a word, a group of words, or some other sign.* Descriptive and emotive meaning are evident in animal distress signals: The descriptive meaning of these signals might be that some dangerous thing is near at hand; the emotive meaning is the feeling of fear or anger which prepares the hearer to flee or fight. Similarly, dual meaning is found in many, if not most words--especially nouns and verbs. The descriptive meaning of the word *mother* ordinarily is "a female human parent." "Mother" also has emotive meaning. For many, it arouses feelings of affection and respect; it makes others feel guilt or anxiety; in some it produces hatred or fear.

Which brings us to an important point about descriptive and emotive meaning: *For different individuals, a word, a set of words, or other signs may have the same descriptive and emotive meaning, the same descriptive meaning but different emotive meaning, or the same emotive meaning but different descriptive meaning.* Consider the term *conscientious objector.* For some people, the descriptive meaning is a person whose refusal to serve in the armed forces is rooted in religious belief. Others also include pacifism founded on a coherent ethical system, not rooted in religious belief. A few go so far as to include persons who object to a particular war, but not to war in general. There are also differences in emotive meaning. For some people, the term is associated with high moral purpose and arouses positive feelings. Others view conscientious objectors as cowards or traitors and feel hostile towards those so labeled. Some feel very little emotion when the term is used. And, of course, any combination of descriptive and emotive meaning is possible for different people. It is not surprising, then, that much of the heated disagreement surrounding controversial issues is caused by the emotive impact of the words used, and by differences concerning their meanings.

Language Problems

Words, as symbols, are an invaluable means of communication and thought. However, *language problems interfere with communication and thinking.* An obvious problem is that *communication breaks down when we fail to understand the meanings of words being used.* This often happens when *words are ambiguous--i.e., more than one meaning is plausible in the given context--and/or vague--i.e., we can only partially tell the meaning intended.*

Honey bees will misinterpret the dance of bees from another district because the same motions carry different messages. The bees' problem is roughly similar to ambiguity in human speech: The sender intends one meaning, but the receiver responds to another. Whether it occurs with bees or man, the results of ambiguity can be serious. The bee who fails to understand might not find food. When men misread meaning, wars may be prolonged, alliances broken, business opportunities lost, or family ties broken. Stuart Chase (Thurman, 1960,pp. 94-95) gives an illustration from World War II. According to Chase, the Japanese word "mokusatsu" can mean either "to ignore" or "to refrain from comment." During July, 1945, the Japanese government was inclined to accept the Potsdam ultimatum, but wanted time to discuss the terms. They therefore prepared a press release saying that the cabinet refrained from commenting on the allies' demand for surrender. However, the press release was translated to say that the cabinet ignored the demand to surrender. Some believe that if the ambiguity of "mokusatsu" had not caused mistranslation, there might have been no atomic attacks on Japan nor Russian invasion of Manchuria.

Recognizing ambiguity or vagueness is particularly important in interpreting the remarks of public officials. Shortly after President Nixon took office, North Korea attacked and downed a United States "spy plane" operating over international waters. Still smarting from the Pueblo incident, many Americans demanded to know what our government would do about the downing. The President responded by warning North Korea that any further attacks would be met with "appropriate force." He was careful, however, not to specify what *appropriate force* meant.

President Nixon's deliberate vagueness undoubtedly served several useful purposes: It allowed him to warn North Korea without committing us to a specific cause of action which we might later regret; by failing to state specifically what military force would be used, or even that military force would be used, it helped reassure those who believed the United States should not take a bellicose stance. The President's vagueness could also create problems. If the man in the street read his own meaning into the ambiguous press release, he might believe that Mr. Nixon promised more than he did, and then feel deceived if the perceived threat was not fulfilled.

While deliberate vagueness on public policy might be useful, or even necessary, at times it can reduce the administration's credibility in the eyes of a naive public. The public can help remedy this problem by paying close attention to the language of public policy statements, and, when desirable, insisting that officials either clarify their intended meaning or acknowledge their deliberate vagueness.

Ambiguity and vagueness can also be troublesome in ordinary discussions of controversial issues. We often talk at or past each other, rather than to or with each other. A favorite technique for avoiding genuine discussion is to use catchy words and phrases which serve as triggers for others to either oppose or agree with us, but which have very little specific meaning. These trigger words give us the advantage of sounding profound without having to explain or defend specific proposals. James Reston* has written a brief satire illustrating this point.

When this type of interchange occurs in real life, it is just plausible enough to convince us that people are saying something. In fact, however, such interchanges generally are a device for avoiding hard thinking. Of course, Reston's use of satire brings up an additional problem in communication which we discuss later--the use of emotive loading, rather than rational argument, to persuade.

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* Salt Lake Tribune, April 18, 1969, p. 21

Reston's contrived dialogue illustrates another point--that *communication might break down if words are used inconsistently.*

Q--Who participates in participatory democracy?

A--Everybody participates in participatory democracy: It is the tribune of the people, the foe of the imperialist machine, the scourge of the military-industrial complex, the enemy of. . .

Q--Wait a minute! You are confusing our cliches. Try again! Who participates in participatory democracy? Now be careful.

A--We do. The majority must be manipulated for its own good and we know what that is.

In this make-believe discussion, Q catches A playing on the ambiguity of "participatory democracy." This causes no real problem because the inconsistency is brought into the open and examined. Inconsistent use of ambiguous terms impedes discussion most when not recognized. Of course, it is difficult to know how to advise a person to be on guard against an unseen danger, but simply knowing that people sometimes shift the meaning of key terms might help us to uncover inconsistency more often.

Additional Cautions

Two or three additional points need to be mentioned before we leave our discussion of ambiguity and vagueness. The first is that words may be ambiguous or vague in their emotive as well as their descriptive meaning. To say this is to some extent redundant. We earlier noted that words can have different emotive or descriptive meaning for different people, which amounts to the same thing looked at from a slightly different angle. It bears repeating, however, since we too easily overlook emotive meaning and focus on descriptive meaning when examining language. If we need to understand why people react differently to the same word, we need to remember that their reaction often has an emotional as well as an intellectual base. When communication is bogged down, even in the face of agreement on descriptive meaning, it might help to look for differences in emotive meaning. Sometimes it is useful to ask how the other person feels when the troublesome word(s) is used. The quality of the discussion might be improved by replacing troublesome terms with near-synonymns having less emotive loading.

Our second point is that some classes of words are especially likely to be ambiguous or vague. Figurative language is an apparent example. We are so accustomed to figurative speech that we are almost blind to its literal meaning. For instance, we read a headline--Laird Countermands Rule, Puts God Back in Army--and it never occurs to us that God has been drafted. And, of course, it should not. For figurative language to make sense, we must ignore one half of the possible ambiguity--the literal meaning--and begin looking for some other plausible meaning. This part of the task is not difficult for most adults, but since the other plausible meaning is not specified, we should be careful not to misread the intended message.

New and unfamiliar words can also cause difficulty. This third caution seems even more obvious than the one above, but it probably contributes to more misunderstanding than most of us care to admit. Laziness is the root of some of this misunderstanding. We refuse to spend the energy necessary to find out the meaning of unfamiliar terms, relying instead on our somewhat unreliable ability to feret meaning from context. As we hear or read a new word a number of times, it begins to take on a familiar ring, which we mistake for understanding. When asked by others to explain its meaning we are brought up short because we cannot. Laziness, however, is not the only culprit; embarrassment adds its share to ignorance. We hate to admit that we don't know what the other fellow is talking about. We fake agreement, or ignore the unintelligible statement and attack some other point. Obviously, discussion would be more rational if we would train both our minds and egos to ask for definitions when confronted with unknown terms.

Cultural Differences

Some communication failures are rooted in cultural and subcultural differences; the mistranslation of "mokusatsu", for example. Cultural differences can even cause misunderstanding when there is no translation problem, as when the discussants are both fluent in the language being spoken. The problem in this instance is not that a word in one language is not adequately translated into another, but that some words have different meanings to people from different cultures or subcultures.

Communication failure due to cultural differences often occurs on the international level. Virginia Gildersleeve (Thurman, 1960, p. 86) claims that the term "sovereign equality" caused considerable difficulty at the San Francisco Conference at which the United Nations Charter was adopted. A Latin American delegate demanded to know what the term meant. The Americans and British replied that it meant a great deal, with a long tradition in the histories of their people. The Latin American then suggested that since "sovereign equality" was an empty phrase for him and his countrymen, the words "judicial equality" should be used instead. By comparison, however, that term was equally meaningless to the American and British delegates.

The average American citizen, of course, is not likely to hold very many discussions with people of other nationalities, but he might be surprised at the extent to which subcultural differences within our own country hinder communication. When discussing public issues, high school students in Utah frequently oppose policies which violate "free agency." Non-Mormons who participate in these discussions sometimes vaguely understand that *free agency* means something like "making your own choice," but are puzzled by the influence of the term on Mormon students. Since both the descriptive and emotive meanings of "free agency" are closely related to other cherished and deep-seated beliefs in the Latter Day Saint (Mormon) subculture--metaphysical and ethical beliefs to which Mormons begin to develop commitment from early childhood--it is not likely to communicate the same thing to a "gentile" (i.e., a non-Mormon, again a special subcultural usage) as it does to a Latter-Day Saint.

Special use of a term is less likely to cause serious problems when "outsiders" recognize that it is being used in an unfamiliar way. More serious problems are likely to arise when people from different subcultures do not recognize differences in the way they use the language. Again, it seems useless to warn ourselves to be on guard against language differences we do not notice, but this injunction may be more effective than we might at first expect.

Examples to reinforce the above warning are not hard to come by. Television, newspapers, popular magazines, and professional journals have focused on various gaps in our society. Whether these gaps are between generations, races, ideological camps, or socio-economic classes, a common claim is that members of opposing groups do not understand each other. Perhaps some of this misunderstanding is due to variations in the ways people from different subgroups use the American-English language. Of course, misunderstanding is not the only source of disagreement, but it is certain that many disputes are false arguments caused by faulty communication. Educators are aware that some school problems of lower-class students are caused by differences between their language and the language of middle-class teachers. Students from various minority subgroups use different figures of speech and other idiomatic expressions. And, perhaps even more important, their syntax is different from that used by their teachers. The problem is deceptively subtle because the teachers and students use the same general language--American-English--and therefore overestimate their ability to communicate. Similar difficulties occur during debate among members of other subsections of our society.

Emotive Loading

The previous discussion of language problems focused primarily on failure to understand and agree upon the meanings of words being used. It is also important to stress that *the emotive loading of words interferes with communication and thinking*. Consider the opening sentences of an article by Dr. Max Rafferty, California Superintendent of Public Instruction.

> If I may string a few adjectives on the line, today's ugly violent, pornographic college conspiracy is the first revolution to be fully financed by its own intended victims. The conspirators are dirty, hairy, foul-mouthed white members of the so-called Students for a Democratic Society on the one hand, and the fanatical sinister Negro members of the Black Students Union on the other. The proscribed and condemned victims are, of course, the parents of America. The ones who pay for the self-same campuses where the conspiracy breeds and burgeons. The folks who foot the Bill. You and I.*

There is no need to argue that such polemics have no legitimate place or serve no useful function. They are certainly more interesting than the tortuous writing of many academics, and even if they serve more to persuade than to analyze, persuasion is important to social cohesion. Even without that, there is an openness to emotive writing which informs us about the author even if it may not enlighten us about the topic. The reader knows immediately where the writer stands. Biases which are flaunted can be more quickly recognized, and more easily defended against. It may also be that some societal problems are so important that motivation is more important than critical reflection, and emotive loading is a great motivator.

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* Salt Lake Tribune, April 2, 1969, p. 13.

However, our first concern is rationality, and emotive loading is in many ways its enemy. *Emotive loading may cause us to agree or disagree with the speaker or writer to a greater degree than we otherwise would. Also, people's reactions to the emotional loadings of language may be so severe that communication becomes difficult or impossible or thinking is curtailed.* Some people might be so incensed that they would be moved to favor much stronger punitive action against "permissive" universities upon reading Dr. Rafferty's articles than they would if the source of their information had a more neutral emotive tone. Dr. Rafferty's attitude might even have been hardened by his own article. In some cases, name calling not only stirs up an audience against the despised object, but also stirs up the author so that his ability to analyze the problem objectively is reduced. In these cases, emotive loading turns on both the writer and the reader, causing them to take positions which they would otherwise avoid, and which they may regret in cooler moments.

Even worse, perhaps, emotive loading can cut a speaker off from the groups he might most need to communicate with and influence--members of the opposing camp and those who occupy the middle ground. Undoubtedly, some readers were offended by Rafferty's use of name calling against students and his coupling of glittering generalities such as "the parents of America" with other emotive terms such as "the proscribed and condemned victims." Few things are more detrimental to communication than angering an audience to the point that it will no longer listen.

The Free Speech Movement--or as some perhaps more accurately dubbed it, the Filthy Speech Movement--illustrates how emotive loading can turn against its users. If the Berkeley students wanted a confrontation with the establishment in 1965, if they aimed to provoke the larger community into violent reaction, they chose suitable means. The average middle-age middle-class American citizen is not amused, and sees no need to be enlightened, by the public presence of banners bearing indiscreet four-letter words. All he need do is imagine them waved in the face of his wife, mother, daughter, or sister and rational reflection flees. So, if as some have claimed, the free speech movement desired a dialogue over whether "war" and "kill" are nastier terms than many we supress to private use, the message was bypassed altogether, to be replaced by revulsion and violence. When emotion hits fever pitch, rational reflection and communication are hindered, if not curtailed entirely.

Revivalist techniques are used by both blacks and whites to fan racial hatred; due process of law has been skirted repeatedly by mobs under the influence of heady speakers; demogogues have acquired national followings by playing on the fears of various segments of society; and few local governments--school boards, town councils, county commissions, and state legislatures--have escaped the anger of citizens inflamed by emotional literature warning of a communist conspiracy, the dangers of sex education in the schools, or the poisonous effects of fluoridated drinking water. (These topics are legitimate content for public debate, of course, but the emotive tone in which they are discussed makes genuine communication or rational reflection difficult.)

Class Names

Our reactions to general terms, to stereotypes, can also interfere with communication and thinking. The emotively loaded class names commonly used in discussing public issues are especially likely to lead people to react to oversimplified categories. Presently, a common stereotype involves Students for a Democratic Society, whose members are thought to be hairy, foul-mouthed, dirty, anarchistic, and advocates of violent revolution. This stereotype would not be plausible if it were not at least partly true. Some members of SDS, perhaps many or even most, fit one or more of these categories. But SDS is a diverse organization; the diversity is exposed during battles for leadership between those who advocate increased confrontation with the establishment, leading to an early violent revolution, and those who favor dialogue, peaceful base-building, and eventual victory through democratic processes. Not every SDS member is violent, dirty, or lazy, and it is an error to automatically apply these labels to each one. Furthermore, the emotive loading of such terms almost insures the communication gap we spoke of earlier. Even worse, that gap is widened on both sides since young dissidents have stereotypes of their own which they apply to members of the "straight set."

In reacting to stereotypes, we not only sometimes forget that people categorized with a label such as "Catholic," "Democrat," or "farmer" are different in many respects, but we also forget that *people and things change even though their names do not.* Reaction of whites to blacks, and vice versa, typifies this. Many white liberals, for instance, construe race relations in terms of civil rights and tend to see their black counterparts as negroes seeking integration or acceptance in a predominantly white society. However, the composition of black activist groups has changed. Many blacks see integration as degrading condescension, reject absorption into the white world, and seek separate identification through whatever is meant by black power, black culture, black economics, and black esthetics--black is good, powerful, and beautiful.

If the aspirations of a large segment of the American black community have changed, so have the values of many whites. Paradoxically, while black leaders formerly fought the doctrines of separate-but-equal and most whites resisted integration of negroes into their neighborhoods, school, and industries, both sides have now come nearly full circle. Whites are looking with increasing favor on a mixed society, and many blacks are preaching separatism. Despite the merits of either separation or integration, there is danger that both sides will cling to former stereotypes--that blacks will continue to see whites as confirmed racists, and that whites will see blacks as humble petitioners seeking acceptance by the dominant group. Perhaps it is knowledge of the effect of stereotypes that has motivated negroes to call themselves first colored people and then blacks. Unfortunately, we have no similar name-shift to indicate changing attitudes among whites.

Conclusion

It is important, after dealing with the problems which words can cause, to again acknowledge the power, complexity, and potential flexibility of human language, and the central role it plays in the analysis of public issues. Without it, human society as we know it would not exist. It is doubtful that the variety and flexibility of human institutions and roles could be mapped in our physiological inheritance. Without highly developed languages, there could be no debate over public policy. The direction of our society could not be pondered and altered to fit rapidly changing circumstances. Only limited flexibility is possible with goals built into the being's nature.

The negative side of the picture should not be overemphasized. Even the ambiguity, vagueness, and emotive loading of words serve useful purposes. None of them is inherently bad. Negative consequences would be sure to follow if we always demanded complete specificity, or never used emotive loading to persuade. The major point to remember is that the words to which we are exposed substantially influence our behavior. The degree to which we are aware of their influence determines in part the degree to which we can handle controversy rationally.

CHAPTER FIVE

ANALYTIC CONCEPTS: ARGUMENTS OVER WORDS

Several chapters ago we indicated our interest in the analysis of public issues--in understanding and resolving disputes over important political-ethical questions. Instead of dealing with disputes directly, however, we took two side trips through related topics: (1) our need for orderliness; and (2) the nature and importance of language. Hopefully, those detours were not wasted. We now know something about frames of reference, perceptual sets, cognitive dissonance, descriptive and emotive meaning and vagueness and ambiguity. With that knowledge we can better understand how disagreements arise and why they persist. When faced with heated issues, our own behavior and that of others should be less perplexing. We might even be more rational, though more painfully aware of our irrationality, and more willing to analyze other opinions, rather than reject them out of hand at first hearing.

The side trips are over, and we are now ready to deal directly with types of disputes arising in arguments over political-ethical issues. There are at least three types: (1) disagreements about the meaning of words; (2) disagreements about factual claims; and (3) disagreements about the relative importance of values. Or to put it another way, arguments over political-ethical issues commonly boil down to definitional, factual, and value disputes. We will discuss these three types of disagreements in the following chapters.

How Disagreements Arise

Language and word misunderstandings present a major problem in political-ethical analysis. Violent arguments often occur over the meaning of words. Terms such as "democracy", "liberal", "conservative", "reactionary", "radical", "freedom", and "responsibility" mean different things to different people, and are capable of arousing deep commitment and engendering heated antagonism. People often claim to know the true meaning of a term and take bull-headed exception when others use it differently. Our previous consideration of the nature of language was designed in part to counter the belief that words have "real", "true", or "natural" meanings.

Recognition that words are symbols--that the relationship between the word and its referent is largely a matter of convention, that different sounds or marks on paper can by mutual agreement be assigned the same meaning--should make us more willing to openly discuss definitions rather than argue that a fixed definition must be accepted. Understanding something about the nature of language, however, by no means guarantees an end to definitional disputes; even if all parties recognize that words have no absolute true meanings, they may still believe that one meaning is better than another.

Consider the case of two economists working independently on developing economics curricula for the elementary grades. One writes a lesson which teaches that families can save money by buying goods and services on sale. The other objects to this lesson on the grounds that it violates the meaning of "savings". "Savings", he claims, refers to the money left over after expenses are deducted from income. A family which spends all of its money to buy goods on sale has nothing left to save.

There are several plausible explanations for this disagreement: (1) The economists might have misunderstood each other, so that the disagreement is apparent rather than real. For instance, the first scholar could claim to agree with the second on the definition of "savings", but also claim that he has no intention of teaching that concept in the lesson in question. Rather, he intends to teach children the practical benefits of buying needed or desired items on sale. If this explanation is accepted by the second economist, we may conclude that there is no definitional dispute, just a failure in the initial communication. (2) Or, the first economist could claim that "buying goods and services at a cheaper price" is a legitimate meaning of the word "save", because the term is often used that way by laymen and scholars in nontechnical settings. That is, this meaning corresponds to a way the word "save" is commonly used. Let us note, however, that disagreement over how people actually use a term is a factual dispute, the resolution of which calls for strategies similar to those used to resolve other factual issues. (3) Both economists may clearly understand how the other uses the term and also agree on how most people use it, yet disagree over its *real* meaning. For instance, the second scholar might agree with the first that most people use "savings" in the way stated, but insist that this usage deviates from the real meaning. The other might reply that in this case the common man understands the real meaning better than the expert. We claim that both are talking nonsense. Words have no real--God-given or natural--everlasting meanings. They are conventions. Their meaning rests on either explicit or implied agreement. Meaning can be changed, and is, when people consent (explicitly or implicitly) to use words differently than before. (4) Our economists might agree that "savings" has no real or natural meaning, yet disagree over what it ought to mean or how it ought to be used. One person might argue that we ought not to confuse children by using words like "save" in ways that differ dramatically from ordinary usage. Another might argue that if we want to teach technical vocabulary to children, we ought to avoid ambiguity; technical and common meanings should not be used simultaneously. Arguing about word usage in this last way makes sense and is, in fact, productive because it forces us to explicate and offer reasons for preferred meanings.

Resolving Word Misunderstandings

In discussions, people often do not say what they intend to say, or what they say is misheard or misinterpreted. This occurs too often to require extensive documentation. During light banter and pleasant chit-chat, communication failures occur infrequently, are not noticed, or do not matter. But when intense conversationalists turn to serious content, frustrations mount as each person is convinced that "No one understands me!" or "I'm the only one who's making sense!"

A simple technique can make evident and correct a good deal of such misunderstanding. Repeating what you think the other person said and obtaining his agreement will help to determine that you understood him correctly, both descriptively and emotively, and may also help the original speaker to recognize that he did not say what he intended. We need not always repeat the other person's statement word for word. In fact, it might be better not to. Instead, we can rephrase our understanding of the other person's statement. Rephrasing--paraphrasing--allows the original speaker to hear what his statement sounds like after it has passed through another person's frame of reference. It also forces the listener to do something more than recall the words the speaker used; rephrasing forces the listener to think about the meaning.

Occasionally people will object to paraphrasing during discussions: Some because it seems to be a needless waste of time and effort, others because it impedes the flow of conversation, and still others because to repeat the other person's argument--or even to give the impression of seriously attending to what he is saying--may appear to be an admission that his claim has some validity.

Each of these objections might be legitimate in some contexts and for some purposes. For example, a person who is more intent on verbally battering his opponent into submission than on rational analysis might find paraphrasing an inappropriate technique for reaching his goals. Other tactics seem to serve him better. Raising the voice and increasing the tempo of speech, so that others cannot get a word in edgewise and will not be heard even if they persist in talking, are effective methods which border on physical domination. However, even though people can and sometimes should be shouted down, the shouter often pays a heavy price. Individuals who persistently and aggressively stifle the opinions of others often alienate and run the risk of repelling their audiences. Interesting, some claim that others can be persuaded more by those who listen and paraphrase carefully than by those who suppress all but their own opinions--a twist on the notion that the last shall be the first. The rationale for this claim is that the man who listens and probes for better understanding knows his opponent. But the man who talks knows only himself.

We should be careful not to value paraphrasing for its own sake; we paraphrase to increase communication, not to glory in our skill at condensing other's statements. Neither ought paraphrasing become a twisting of what was said; we should guard against restatements that distort the speaker's intended meaning. Distortion is often deliberately used to manhandle opposing opinions. Consider the following possible examples:

Speaker: "We shouldn't bus students from one neighborhood school to another."

Reply: "You say that black and white children shouldn't go to school together?"

Speaker: "Welfare payments to needy persons should be increased."

Reply: "Oh, you believe in rewarding people who are too lazy to work".*

Defining Words

On occasion, clarification of intended meaning requires more than paraphrasing what the other person said. *Often discussants use the same word to refer to different things (ambiguity) or use different words to refer to the same thing, or the meaning of a word or words being used is not clear to at least one of the discussants (vagueness).* If restatement and probing fail to establish common understanding, *it is sometimes helpful to attempt one or more of several ways of defining words.*

The most obvious source of definitions is a dictionary. We should not, however, treat dictionaries as holy writ. They help by indicating common usage and by giving an array of meanings from which we might select an appropriate one for the discussion at hand. They can also indicate important shades of meanings catalogued in dictionaries. Language is alive in that it responds to changing reality. To limit language to dictionary meanings would be to deny words the ability to reflect change. Furthermore, dictionaries usually give more than one meaning for a word; and they do not provide criteria for deciding which of several catalogued meanings ought to be selected (except for those dictionaries which provide distinctions in "preferred" meanings for synonyms).

If the dictionary proves to be an unsatisfactory arbitrator, *the discussants may try to develop their own definition.* At times, *definition by example--pointing definitions--can be used.* This type of definition is most useful when the disputed term has a concrete referent which is physically present. Even then, confusion may occur over which characteristics of the referent are meant to define the word; it might be difficult to determine what is being pointed at and what is not. Therefore, examples not intended to be encompassed by the definition may be included.

Giving verbal examples rather than pointing at physical referents is sometimes useful. Citing verbal examples has the advantage of not requiring the immediate presence of referents, and of being usable in some cases where the referent is intangible.

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*Unfortunately, distortion is sometimes a by-product of the socratic teaching style often associated with the analysis of public issues. Teachers who use a socratic technique ought to be particularly aware that students might learn the wrong lesson. Young people who observe first-hand the power of stating analogies and shifting emotive meanings,see these teaching tactics as used in a deliberate attempt to distort meaning, may all too readily see language as a weapon for verbal warfare rather than as a tool for increasing understanding.

Teachers might have to re-examine their own reasons for being attracted to socratic analysis. Clarification through restatement is probably most effective when the listener--even a teacher--is sincerely interested in the speaker's opinions. Speakers--even children--who perceive their ideas as being manipulated have little reason to cooperate in the difficult task of clarifying meaning. These are not arguments for abandoning socratic teaching, but we should recognize that it is a powerful technique capable of hindering as well as furthering communication.

Also, we can often *give synonyms* as a means of clarifying word meaning. We can define "joy", for instance, as a special type of happiness, and we can say that nymphs are kind of like fairies. With synonyms, care must be exercised because no two words have exactly the same descriptive and emotive meaning. To define by synonym or antonym is to approximate meaning, which is also probably true of most definitional attempts.

We have not treated pointing definitions and definition by synonym extensively because they are often not the best tools for attacking the types of definitional problems which occur in discussions of public issues. Pointing definitions are essential to teaching children the meaning of simple words--"cat", "house", "tree", "boat"--but are not very adequate when we try to communicate what we mean by "representative democracy", "opportunity cost", "ethnocentrism", or "imperialism".

For terms that are complex, abstract, and/or value laden, *definition by specifying characteristics, criterial definitions, are useful.* The following is a short example: "In colloquial language, the term 'scarcity' is frequently taken to mean insufficiency or poverty; but in the terminology of economics, it refers only to the need for choice in the allocation of material resources" (Martin & Miller, 1965, page 6).

In constructing criterial definitions, the definer lists what he believes to be the essential characteristics of the referent of the term, frequently specifies characteristics which he does not want included in the world's meaning, and sometimes proceeds from genus to differentia. Each of these points is illustrated in the quoted definition of "scarcity". The author first lists characteristics which he thinks others might incorrectly include--". . .'scarcity' is frequently taken to mean insufficiency or poverty". He then lists what he claims is the only essential characteristic of "scarcity"--". . .but in the terminology of economics, it refers only to the need for choice in the allocation of material resources". In listing the essential characteristic he refers to genus and differentia--". . .the need for choice" is the general class, and ". . .in the allocation of material resources" differentiates this type of choice from others.

Criterial definitions are especially useful because they tend to make evident the particular points of difference over the meaning of a word. For instance, the above definition of "scarcity" distinguishes between common usage and the technical vocabulary of economics. In another example, Alexander Hamilton, acting as counsel for the defense in *People vs. Croswell,* defined "freedom of the press" as ". . .publishing the truth, from good motives and for justifiable ends, though it reflect on the government, on magistrates, or individuals" (Morris, 1957, page 361). In 1804, the legal definition of libel did not take into account whether purported libelous statements were true, whether the speaker's motives were good, or the ends justifiable. Furthermore, it was permissible to attach laws, but libelous to attack their authors. In selecting what he thought were essential characteristics of "freedom of the press", Hamilton deliberately distinguished between the definition under which his client was charged and the definition he wished the court to adopt. Each characteristic listed added to the distinction between old and new meanings.

Mixing Definitions

Although for orderly presentation we have discussed various types of definitions under separate headings, we do not mean to imply that there is in practice a rigid hierarchy of steps to be followed, that definitions should adhere to pure patterns, or that different types of definitions should be used in isolation. The difficulties of arriving at adequate definitions cannot be resolved by the mechanical application of preset patterns. Definitions which faithfully follow an accepted form amy be useless, and mixed definitions are often helpful. Synonyms, antonyms, spontaneous lists of general and specific characteristics, even photographs, drawings, and diagrams might be needed to convey the intended meaning of a word or phrase.

Beyond Clarification

In terms of strategies appropriate to language problems, the types of definitions discussed so far are primarily clarification moves. This is particularly true of definition by example and/or synonym. Although probably most useful as a clarification move, criterial definitions can also be used to resolve disputes over meaning if disagreement is not too severe; when disputants lay out essential characteristics of a term, each has the opportunity to examine the other's list for consistency and for important points that might have been overlooked previously. Some possible outcomes of the careful comparison of criterial definitions are: One definition is chosen over the other; both definitions are modified into a mutually satisfactory meaning; or, each disputant remains committed to his position. In the later case, strategies which go beyond clarification might be tried. One strategy is persuasion. A second is stipulation.

When Hamilton presented his new definition of "freedom of the press" or, conversely, his definition of "libel", he was in a position where clarification would not suffice. Although understanding was essential, it was not enough; the judge and jury had to be convinced that the new definition ought to be adopted. Hamilton clearly understood that persuasion was the proper strategy. Part of his argument follows:

> The liberty of the press consists, in my idea, in publishing the truth, from good motives and for justifiable ends, though it reflect on the government, on magistrates, or individuals. If it be not allowed, it excludes the privilege of canvassing men, and our rulers. It is in vain to say, you may canvass measures. This is impossible without the right of looking to men. To say that measures can be discussed, and that there shall be no bearing on those who are the authors of those measures, cannot be done. ...It is essential to say, not only that the measure is bad and deleterious, but to hold up to the people who is the author, that, in this our free and elective government, he may be removed from the seat of power. If this be not to be done, then in vain will the voice of the people be raised against the inroads of tyranny. For, let a party but get into power, they may go on from step to step, and, in spite of canvassing their measures, fix themselves firmly in their seats, especially as they are never to be reproached for what they have done. This abstract mode, in practice, can never be carried into effect. (Morris, 1957, page 361.)

Hamilton's claim, that a definition of "libel" which did not allow for truthful attacks on office holders was detrimental to elective government, carried the day. In 1805, the New York legislature passed a libel bill incorporating his formula.

There are times, then, when it is possible and desirable to successfully argue that one definition is better than another because its use leads to consequences consistent with important values. There is also a subclass of this strategy--that the adoption of a given definition will hinder of help the discussion of a vital issue. There are at least two types of cases where definitions of key terms either stall a discussion or move it closer to resolution: The first occurs when a word carries a heavy load of emotive meaning; the second when the descriptive meaning controls the range of topics admitted to the discussion.

In an example of the first type, a person might argue that when discussing the merits of war "professional killer" is not a desirable definition of "soldier" because the emotive loading could easily impede rationality. Following the imputation that a soldier dear to them is a "killer", parents, wives, children, brothers, and sisters might not be able to dispassionately reflect on whether war is justified. The same is true for numerous other people who have strong positive commitments to the military. Rational reflection on sensitive issues is difficult enough without the introduction of loaded definitions.

The same example can be used to illustrate how poor definitions may inadequately control the range of topics admitted to discussion. If discussants agree to limit the meaning of "soldier" to "professional killer", other functions of soldiering such as healing, teaching, and building are automatically excluded from consideration. Further, the meaning of "soldier" is stretched to fit non-military people such as trigger men for the mafia.

Stipulating Definitions

That one definition facilitates discussion better than another, or that one definition leads to better consequences which extent beyond the discussion, cannot always be successfully argued. Despite the best efforts of the discussants, disputes founded on commitment to differing definitions sometimes cannot be resolved. Unfortunately, unsettled definitional disputes can block further discussion of the political-ethical question at hand. It is not uncommon for discussions of vital questions, such as whether the United States should be involved in Vietnam, or whether Israel should retain Arab land captured during the three day war, to become hopelessly mired over the meaning of "aggression", "national sovereignty", "self-determination", or "self defense". When this occurrs--when reasonable attempts at clarification and rational persuasion fail--stipulation of meaning can salvage worthy discussions which would otherwise be lost, and can refocus attention on central policy issues, rather than on the meaning of words.

The utility of stipulation can be seen by examining a recent discussion. A class of high school seniors was agonizing over the political-ethical dilemmas surrounding an alleged mercy killing in which a young physician was charged with murdering his elderly cancer patient by injecting air into her blood stream. The students tried to determine whether the jury *should* have found the doctor guilty. Conflicting expert testimony--by friends of the accused--over whether the patient died before or after the injection complicated the issue and stimulated argument among the students over the meaning of "death". Some held that a person is dead when his heart stops. Others claimed that even though the heart might continue to function, a person is dead when a flat brain wave pattern is obtained. One even suggested that a person in the last stages of an incurable illness is dead already for all intents and purposes. The class was unable to agree on the best meaning of the disputed term and spent the major portion of the period in heated and largely fruitless discussion of competing definitions rather than on the central issue of the propriety of mercy killing.

A productive strategy, once the hang-up became evident, would have been to stipulate--for the purposes of the discussion--that the term "death" would mean one of the suggested definitions. Given that definition, the class could consider the consequences of allowing patients to be killed under various circumstances, and could discuss which values are violated or supported by each consequence. When satisfied that the consequences related to one definition have been adequately considered, another definition could be stipulated and the process begun anew. While this procedure cannot guarantee resolution of policy issues, it increases the probability that central problems will receive thoughtful consideration.

Obviously, settling definitional disputes, either by agreeing on the best definition, or by stipulating a definition for the purpose of continuing the discussion, does not exhaust the difficulties of rational analysis. Once a word has been defined, determining whether specific individuals, events, etc., should be classified under that label is an empirical or factual problem. The problem is to determine whether the thing to be classified has the characteristics identified in the definition. If "death" is defined as heart stoppage, then whether the previously mentioned physician killed his patient depends on whether her heart quit beating before or after he injected air into her veins. As we shall see in the following chapter, settling factual questions--even those which are apparently straightforward and simple--is not always as easy as we might at first expect.

CHAPTER SIX

ANALYTIC CONCEPTS: DISAGREEMENTS OVER FACTS

Settling factual disputes is a major problem in political-ethical analysis because ethical disputes often involve disagreement over the present state of affairs, what led to it, and what the consequences of different policy decisions and actions are likely to be. In fact, factual disputes occur ostensibly far more often in discussions of policy issues than do either definitional or value disputes. Arguments which appear to be about facts are often basically word or value disputes. They are probably not recognized as such largely because people are not used to distinguishing among types of disagreements. Since people are more accustomed to construing problems in factual terms, definitions and values are often dealt with only by implication.

For example, children justify their squabbles with statements such as:

"He hit me first!"

"But he stuck his tongue out at me!"

"That's because he spilled my paint!"

"That was an accident, honest!"

Whether or not the children's factual claims are true, they imply appeals to common values: Self-defense (He hit me first!) is an oft accepted value in justification of doing harm to another; we also value self-defense against physical attacks on our property (He spilled my paint!); but we are willing to forgive acts which otherwise are considered aggressive if they can be shown to be accidental.

Whether the implied values are in conflict--whether there is a value dispute in this example--is not apparent. An explicit value dispute might sound something like this:

> "I know I stuck my tongue out at him, but that's no excuse for hitting me. Hitting is worse than sticking out your tongue."
>
> "It isn't either! Sticking out your tongue is one of the meanest things you can do!"

Arguments between children are not the only ones in which value disputes are imbedded in apparent factual claims. Heads of government, military leaders, and business executives seldom state openly the values by which they support their actions; nor do they state how those values are superior to the ones supporting the opposition. When wells off the coast of California leak, oilmen defend themselves by claiming that they have followed government regulations to the letter--a factual claim--but they do not explicitly state that industries have no moral obligation to follow precautions more stringent than those embodied in law--a value claim. Conservationists reply that the oil industry's precautions are not adequate--a factual claim--but may not openly point out that moral obligation to guard against pollution and contamination extends beyond adherance to the letter of state and federal regulations--a value claim. Although oilmen and conservationists quite probably have a genuine value dispute, their stated argument stays at the level of "What is or was?" rather than "What ought to be?" This tendency to stop short of openly stated definitional and value disputes accounts in part for the greater frequency of factual issuesin public and private discourse.

The high frequency of factual questions can be observed in newspapers and news magazines. Any single issue of a periodical is likely to raise more important questions of fact than either the reporting staff or readers could answer with justifiable assurance. On a single day, the following topics--among many others--were discussed in the news media of St. Louis: a proposed increase in the state income tax; the death of Ho Chi Minh and of Everett Dirksen; and a gun battle between the police and an unknown sniper.

Whether Ho Chi Minh and Senator Dirksen really died has not been seriously debated, but how they lived has been the subject of considerable controversy. Where was Ho's principal loyalty? Was he first, last, and always dedicated to the triumph of international communism, or was he above all things a Vietnamese patriot with ultimate commitment to country? What does the future hold for Vietnam? Was the charisma of "Uncle Ho" essential? Can the North remain committed and united through the horrors of war now that he is gone?

Everett Dirksen's death also stimulated controversy. While most papers eulogized him, the St. Louis Post Dispatch claimed in an editorial (September 8, 1969) that Dirksen lacked ideals and commitment to principles, that he loved political power for its own sake, and that for it he sacrificed the lofty and worthy aspirations of his youth. Was the Dispatch correct? Were Dirksen's political shifts from issue to issue the result of genuine struggle between his commitment to conservative principles and his desire to see social justice? Or were they due to his perception of the shifting political tide and his drive to stay on top?

How about the behavior of the St. Louis police? Did they overreact when a sniper shot at them from the upper floors of a black ghetto apartment house? Was their response an orderly and reasonable attempt to locate the culprit, or was it an indiscriminate and unnecessary attack on innocent adults and children? Would they have responded the same way had the sniper been shooting from a high-priced white apartment? In a similar situation, would the police have exposed middle-class white children to rifle fire? Would they have kicked in the doors of white middle-class apartments and verbally abused the occupants? If the police treated blacks differently than they would have whites, what are the reasons?

Specific and General Factual Claims

In attempting to deal with questions like those above, *it is sometimes useful to distinguish between specific and general factual claims. Specific factual claims are assertions about what is true of a particular person, thing,* *or event at a particular time in a particular place. General factual claims are assertions about what is true of all or almost all of the members of a group of people, things, or events.*

Any attempt at making a pure distinction between general and specific factual claims is likely to be frustrating. Rather than dichotimizing factual claims into statements about specific events on the one hand and general events on the other, it is more useful to think of a continuum of claims running from the very general to the specific. The following excerpt from an article about the current New York City mayoralty race gives some feelings for the way in which factual claims can range from general to specific.

> "Four years ago, the voters ejaculated the backwater of their good government and fusion spirit and elected John Lindsay. Now, however, the dazzle has left the Mayor's image, and people are laying their gripes with him. The issues he raised in 1965--progress, integrity, and change--are dead. . . ." (John Berresford, "New York Mayor Race Unmatched in Election History", Washington University *Student Life*, September 26, 1969, p. 8)

Although the first sentence in the above excerpt contains several claims, some of which are pretty fuzzy--what does "the voters ejaculated the backwater of their good government and fusion spirit" mean--at least one quite specific claim can be identified: "Four years ago the voters. . .elected John Lindsay." We call this a specific claim because it is about a specific event that occurred in a specific place at a specific time.

But categorizing this statement as a specific claim is too simple, because the claim itself implicitly rests upon a very large number of even more specific claims. The election of Lindsay was not a single event. It was a compound of thousands of specific events, i.e., thousands of individuals casting votes, and the election night verification of the compound event--Lindsay's victory--required verification of each single event--each act of voting. The point can be pushed even further. It could be argued that a single act of voting is in fact a compound event, the ultimate verification of which may require the verification of a number of more specific acts: Did the voter mark his ballot? Did he mark it correctly? Was he a registered voter? Of course, for most purposes it is not necessary that we divide claims into such minute parts. This process can very quickly become absurd and, in fact, can cripple attempts at rational analysis of public issues by diverting scarce energy and time. Most of us would be satisfied if Lindsay's election on a particular date was verified by reference to some authoritative source.

Let's examine a second claim in the excerpt quoted above: "The issues he [Lindsay] raised in 1965--progress, integrity, and change--are dead. . ." This is a more general claim than the one concerning whether Lindsay was elected; it is not about a specific event at a specific time in a specific place. "The issues are dead" can be interpreted to mean "the majority of the voters are no longer interested in these issues, or are now more interested in other issues." It is obvious that we cannot determine the opinions of thousands of voters through a single observation. Verification of whether the issues really are dead requires that we poll a multitude of individuals, that we verify a multitude of specific claims.

Trying to distinguish between general and specific claims is often frustrating. Despite the frustration, attempts to sort out the general and the specific can be fruitful, especially attempts to determine which more specific claims were used to construct a general claim or what general claims can be verified by reference to given specific claims.

Our contention that it is fruitful to distinguish between factual claims on a general to specific continuum is based upon some assumptions we make about the nature of knowledge. We hold that all factual claims are either about specific events or are grounded, at least implicitly, in other claims about specific events. Specific factual claims are sometimes deduced from general claims, but general claims are the product of either induction from or summation of specific claims, or are deduced from other general claims which are based on specific claims.

For example, if we trust the general claim that "Almost all military officers are almost always wrong about all wars", then we can feel safe in deducing that a specific officer is probably wrong in predicting that a given war will end within a given year. But suppose that we don't trust the general claim and want to determine how it was established. We might find that it was deduced from some other even more general claim, such as "Almost everybody is almost always wrong about all wars." The last claim may have been deduced from a more general one, and so on. Eventually, we will reach a foundation general claim--the one upon which the others were based. This claim will have been fabricated, announced as self-evident, or based upon a body of evidence composed of specific factual claims. Since great stock cannot be placed in fabrications and since tautologies--correct, but circular and therefore empty statements--are the only self-evident claims (other such claims simply beg the question of evidence), these are hardly adequate bases for general claims. When the general claim is based on specific claims, we need to examine the statements about specific events, as well as how these claims are combined to make more general ones. Although it may seem logical to consider first how specific claims are verified and then consider how they are combined into general ones, we will take up these points in reverse order.

Verifying General Claims

In the previous paragraph we stated that general claims are frequently the product of either induction from or summation of specific claims. For example, the general claim "Four years ago the voters. . .elected John Lindsay" is based upon summation of specific claims, but "The issues he [Lindsay] raised in 1965--progress, integrity, and change--are dead. . ." is probably based on induction from specific claims. Now what do we mean by that? If we consider each vote to be a specific event, then it is evident that Lindsay's election is to be verified by counting all of the votes, that is, by summing the specific events. We say, therefore, that the general claim is verified by summation. On the other hand, public opinion is usually determined through sampling rather than summation. The reporter who claimed that the issues of 1965 are now dead may be speaking only from casual observation, or he may have access to a sophisticated poll which sampled public opinion in New York City. In either case, it is quite unlikely that the opinions of each New Yorker were determined directly. The dominant political concerns of most New Yorkers were probably extrapolated from data concerning the opinions of some. Of course, the data may or may not be adequate, and the induction may or may not be justified.

Verifying Specific Claims

Typically, we are not first hand observers of the events--such as race riots on the Vietnam War--about which public debate swirls. We rely on someone else's observation and on the reports of those operations. It is important, therefore, that we learn to ask questions which will help to verify observations and reports.

Our previous consideration of man's need for order is relevant here. As the discussion in Chapter 3 would indicate, *our information about past events is always limited and fragmentary, and any witness is likely to have some accurate and some erroneous information.* The incompleteness and limited accuracy of information reported by any witness is due largely to the fact that there are more stimuli available in any event than we can attend to and recall. Because there are more stimuli than we can handle, some selection and ordering are necessary. Each of us develops perceptual sets and feeling predispositions which facilitate this ordering and selection, but which also cause us to remember only parts of the situation we are in, and cause different people to perceive the same events differently. These sets are particularly likely to bias our recollections when we are deeply committed, threatened, or frightened.

Recently, one of the co-authors was given a stark reminder of the fallibility of human perception. He was running his dog through a park when the animal spotted something on the far side of an adjacent road, chased after it, and was struck by a car. Although he witnessed the entire scene and thought he had a vivid recollection of what happened, the author was either mistaken or uncertain about several points. He could not recall whether the dog got in front of the automobile and was struck by it, or whether the dog ran into the side of the moving car. He was not certain whether the dog ran full speed until struck, or whether he slowed down at the last moment. He could not state how far the dog was tossed by the impact, whether the animal was thrown clear of the auto on initial impact, or whether he was struck more than once. And, he had a very clear, but mistaken, recollection that the accident occurred in the traffic lane immediately adjacent to the park; but, in fact, the dog crossed two traffic lanes and a wide grass median before being hit.

The fallibility of human perception is not limited to specific claims about events such as encounters between dogs and autos; it imposes similar restraints on the credibility of claims about the motives of politicians, the actions of policemen, or the projected effects of proposed public policy. There are, then, numerous instances in which it is important to inquire into the qualifications of observers. The following questions are helpful in guiding that inquiry.

Questions of Observers

Questions we may want to ask about observations upon which statements to be used as evidence are based include:

1) Has the observer the relevant expertise, based on education or experience, to make the required observation.

2) What biases or sets does the observer have that might have affected his observations?

3) Was the observer's emotional state such that it might have interfered with or influenced his observations?

4) Does the observer have a history of accurate observations?

5) Do the observations agree with those of other independent observers?

Of course, each question does not apply with equal force to every claim or to every observer. Applying the questions to a claim that guards at a certain black high school treat whites and blacks differently might help to indicate their usefulness.

Expertise. Suppose it is claimed that guards consistently stop and question young black men in casual dress before allowing them to enter the school building, but only occasionally stop young white men. Generally, it shouldn't require any great expertise to determine whether a school visitor is black or white, male or female, dressed casually or in white shirt and tie, or whether he is stopped and questioned or allowed to pass without challenge. At first glance, the question of expert observation appears to have little relevance to this particular claim, but suppose it is modified to state that even when whites and blacks are stopped and questioned equal numbers of times they receive different treatment. Verification of this claim may require that the observer be able to distinguish important differences in the guards' facial expressions, tone of voice, and bodily gestures when questioning persons of different race or apparent social level.

More important perhaps than whether the observer is an expert is whether he behaved like one: Is the claim based on casual experience or upon systematic observation? Was an actual count made of the number of times whites and blacks were stopped by guards? Was a count made for all guards or for an adequate sample of the guards? Was it made at various times of day and at various entrances to the school? (Was a person entering the front door at 9:00 a.m. given the same scrutiny as a person entering a side door at noon?)

Observer Bias. Questions about biases and sets are appropriate to all or nearly all claims concerning differential treatment of races, because in the United States, at least, nearly everyone--black or white--is vulnerable to the charge of some degree of racism. However, some people are clearly more open to the charge than others, and their observations are therefore more suspect. On claims where bias is so readily suspected, we ought to make special efforts to determine whether independent observations by persons with different sets yield similar findings. An extreme example would be a black militant and a white ultra-conservative performing independent observations and *both* concluding that guards do or do not treat whites differently than blacks.

Observer's Emotional State. During emotional stress, observations are more likely to be distorted by biases than when made under less threatening circumstances. Therefore, in weighing the claim that whites received preferential treatment by police-guards at a black high school, we ought to inquire into the emotional state of the observer. Was he feeling the effects of a particularly disturbing or pleasant experience? Were the observations made after a run-in with school authorities or teachers? Or after receiving praise for exceptional school performance? Were they made during the aftermath of a frenzied celebration of athletic victory? Or during the emotive heat, tension, and insecurity of a student sit-in? Was the observed event itself calm and orderly--a guard quietly questioning a person entering the building? Or did it involve shouting, argument, threats, and physical conflict?

As we have pointed out before, questions to be asked of observers do not apply with equal force to all events. Some claims immediately and obviously demand that we consider the emotional state of observers; with other claims, the relevance of questions about emotional states is not so apparent. We cannot, for instance, immediately determine whether the observations of actions by the school guards were affected by emotion because we were not told the circumstances under which the observations were made. In contrast, observations--whether by policemen or citizens--of the sniper incident referred to earlier were obviously made under stress. Most people could not endure or witness such an event with calm detachment.

Reputation for Accuracy. It pays to consider the observer's reputation for accuracy and truthfulness. Unfortunately, we often know very little about the observer and cannot make a judgment about his past accuracy. There are times, however, when we can. The much discussed credibility gap associated with statements of certain political and militaty figures illustrates this point. Most of us would probably doubt testimony given by a Bobby Baker or Billie Sol Estes, even if by other criteria they were the best potential sources of information available--their record for truth and accuracy is too shoddy. Similarly, claims concerning casualties in Vietnam--made by either us or the North Vietnamese--and predictions concerning who will win by when have been so consistently inaccurate that a person feels the fool when caught believing them.

Questions of Reports

There are other sets of questions we need to ask about claims. To some degree it is possible and useful to separate questions asked of observers from questions asked about reports. Some useful questions about reports are:

1) What are the time and space relationships between the reporter, the event, and the statement of the event?

   a) Was the reporter an eyewitness or is he reporting on the basis of someone else's observations?

   b) If the reporter was not an eyewitness, does he tell who his source is?

   c) If the reporter is not an eyewitness, is his source (or sources) reliable?

   d) If the reporter was not an eyewitness, did he get his information directly from an eyewitness?

e) How soon after his observation of the event or after being told about the event did the reporter make his statement about it?

2) What biases does the reporter have?

3) Have the means of presenting data (charts and graphs, statistics used) affected the picture given?

4) Does the report agree with other independent reports?

Relationships Between Reporter, Event, and Report. For many people, one of the most frustrating aspects of reading newspapers and magazines is the nearly universal failure of reporters to state whether they witnessed an alleged event. This failure is made even more frustrating by the tendency of reporters to state claims in unqualified terms. When this occurs, the unwary reader is unwittingly lulled into a false sense of certainty concerning what is known about important claims. Reporters seldom provide us with the information necessary to make even a tentative judgment about the accuracy of what we read. Although we know that accounts are often pieced together from snippets of information gathered from numerous sources, that knowledge helps very little if we are not told how a specific report was constructed.

There are times when we know or can guess that the reporter was not an eyewitness. This information may come in a hint or clue hidden in the body of the article; it might be surmised from the nature of the claims made in the article; or it might be openly and directly stated by the reporter. A journalist trying to reconstruct controversial incidents such as the slaying of Martin Luther King or John F. Kennedy might openly state that he was elsewhere at the time of the shooting, and then carefully build a case for his version of what happened, including identification of witnesses he has interviewed, something about their personal background, reputations, and the alleged circumstances under which they saw the killing. When events are reported in less detail, and it is anticipated that reports will be exposed to less careful and critical scrutiny, identification of sources of information is usually less direct. Nevertheless, we can sometimes make a fairly safe guess whether the author was a witness. A typical wire service report from Vietnam often describes simultaneous military action in several widely dispersed, nearly isolated and dangerous battle locations. An individual reporter could not witness all of the events reported as part of the battle--where the enemy came from and went, counts of friendly and enemy troops killed and wounded, numbers of combatants on each side, number and size of artillery involved, and acts of personal heroism.

When we know that the reporter was not an eyewitness, our attention should focus on the qualifications of his source of information: Who was that source? Was the source an eyewitness or just one link in a long chain of persons leading from observation to report? If he was just a link, how many persons passed the account along before it appeared in the article being read? And how much time lapsed between observation and report? The more people involved in passing a story along, the more opportunity there is for perceptual sets to alter the original account. The greater the time lapse, the greater the opportunity for memories to shift and fade.

Questions concerning the qualifications of sources of information should not be taken lightly. Even though answers are seldom found in the news accounts which shape what we believe about important events, these unanswered questions remind us that reports are not to be swallowed whole. That doesn't mean that we ought to adopt a cynical attitude, but a fairly sizeable amount of skepticism is preferred over open-faced naivete.

Reporter's Bias. Determining a reporter's bias is often easier than determining his sources of information. Bias may be revealed through the slant given an article by the reporter's choice of words, by the reporter's background and group affiliations, and by the general political posture of the publication in which the report was made. How bias can be revealed in each of these ways is illustrated in the following excerpts from a newspaper article, the content of which is purported to be a statement released by fifteen Brazilian political prisoners who were exchanged for a kidnapped U.S. Ambassador.

BRAZILIAN PRISONERS TELL OF TORTURE

> Mexico City (LNS). . .We come from different regions of Brazil, with different professions and activities. What unites us is the struggle for the conquest of freedom in Brazil, the effective defeat of imperialism by the circumstance of the kidnapping of Ambassador Burke Elbrick, an event which is within the political framework created by Brazil's police state--of which all 90 million Brazilians are victims. . . .
>
> Torture is now an everyday thing in our country. Many die in the jails, where thousands feel anguish for their own suffering as prisoners and for the suffering of all Brazilians who are deprived of their right to organize society to establish the basis of economic development.
>
> Violence is most cruelly directed against the workers, even inside the unions. Following the example of Nazi and fascist laws Brazil has prohibited strikes. . . .(*Student Life,* Washington University, September 19, 1969, p. 9)

The bias of the reporters--the 15 former prisoners--is apparent in their choice of words to describe the activities of the Brazilian government: "exploitation of our country," "Brazilians are victims", "torture is an everyday thing", "Nazi and fascist laws". In contrast they describe the questionable activities of revolutionaries in very bland terms: ". . .the kidnapping of Ambassador Burke Elbrick [was] an event which is within the political framework created by. . ." Of course, the reporter's bias is easily understood--political prisoners are apt to neither enjoy captivity nor learn to appreciate their captors. Further indication of possible bias is provided by scanning the agencies which published this report. The Spanish text was printed by the Cuban News Agency, was translated by Liberation News Service, and was finally published in a left-leaning student newspaper.

Independent Reports. If we are convinced that there is ample evidence of bias in the former prisoners' account of conditions in Brazil, how should that knowledge shape our behavior? Ought we to discount the report altogether?

Simply hold our judgment of the accuracy of the report in abeyance? Refuse to read future editions of the student newspaper which carried the story?

A person might decide to discontinue reading a publication he thinks consistently distorts the news, and may properly justify his behavior on the grounds that the limited amount of time available for reading should not be wasted on unreliable sources. Before taking that step, however, he should note that there is no such thing as completely objective reporting--while we can reduce or modify their effect, no one can eliminate his perceptual sets and feeling predispositions. He should also note a positive quality of biased accounts--especially those which do not agree with his predispositions: They afford a different viewpoint--a perspective he might not see without the help of those on the other side of the issue. A sound argument can be made for reading a number of sources with dissimilar frames of reference. Not only does this practice broaden the narrow perspective obtained by reading and listening to only those who agree with you, but also provides independent checks on factual claims. If rightest, leftest, and middle-ground reporters agree in their descriptions, we can rightfully be more assured that the event took place in the manner claimed.

Means of Presenting Data. We need to shift our ground slightly to consider another source of factual inaccuracy in reports--distortion of data through the misuse of graphs, charts, and statistics. Two favorite techniques by which information can be distorted to benefit the reporter are (1) incomplete labeling of graphs and charts; and (2) truncation of graphs and charts. Lines that seem to indicate trends and bars that supposedly show growth or decline often impress people and seem to say something even when they are so incompletely labeled that critical scrutiny cannot uncover the specific content of their message. Furthermore, impressive-looking graphs frequently mislead, simply because they are not all there. A bar graph which actually shows slight differences between compared quantities can give the appearance of great differences if all but the top of each bar is cut off and discarded.

Incomplete labeling and truncation of graphs and charts are not the only means of distorting or misrepresenting data. A favorite trick of political parties and partisans is to use different units of comparison. For instance, the political strength of opposing candidates is sometimes misrepresented through the use of colored maps. If two men ran a tight race, one can be made to look stronger by coloring a map to indicate that he won votes equal to the population of geographically large but sparsely settled states; the rival candidate's votes are represented by geographically small but densely settled states. The visual contrast is striking: one candidate is made to look much more popular than he really is.

Information is often distorted through the misuse of statistics. We have all been combarded with glib claims concerning the proportion of eminent persons who prefer one commercial product or one political policy to another. It may very well be true that "Two out of three doctors prefer. . ." or "Five out of seven generals predict. . .", but we must always ask how many doctors or how many generals were polled. Are the statements to be taken literally? Were only seven generals asked to give their predictions? Were only three physicians querried concerning their preference? Statistics can also be used to give a false implication of cause and effect. Consider the following fictitious claim: "Fatal automobile accidents increased 30% in Oklabama the year after the state legislature approved liquor by the drink in bars." The statistics are impressive, but close inspection of the situation may indicate that the liquor law had nothing to do with the increased accident rate.*

In examining the accuracy of reports, we might easily succumb to a common error--the assumption that the source of all or most inaccuracies is in other people and in what they have written. Of course, we know better: *Our* sets, *our* predispositions have powerful affects on the way we perceive and remember reports.

More on General Factual Claims

Much of what we have said in this chapter applies to both specific and general factual claims. The majority of what is still to be said applies only to general claims.

The verification of general claims is usually a more complex process than is the verification of specific claims. When the general claim involves a summation of specific claims--such as the counting of votes in an election--the major questions are: (1) Is each specific claim valid or acceptable? and (2) Have the specific claims been totaled correctly? All of what we have said above concerning the verification of specific claims applies to the first point, and the second point is primarily a problem of accurate addition--which, of course, is at times no simple matter.

The verification of general factual claims based on inference or induction is more complex than the verification of summation general factual claims. As with summation claims, the validity of the observations from which the general claim is inferred must be examined. Again, all that has been said above concerning the verification of specific claims is applicable to this point.

Sampling. How do general factual claims based on inference differ from other claims? One important difference is that setting up criteria for their verification requires a consideration of sampling theory. This is particularly true of general factual claims concerning human behavior**. Questions we need to ask about samples are: (1) Are a sufficient number of cases included in the sample? and (2) Are there adequate assurances that the sample is typical, either through random or representative sampling?

Even superficial reflection upon our own behavior will indicate the extent to which we are prone to draw general conclusions from a limited number of instances. One of the authors recently visited three secondary schools in the general vicinity of a large Midwestern city. One school had primarily black students and was located within the central city; the second was racially mixed and located in one of the older suburbs on the edge of the city; the third had all white students and was located in the fringe suburbs. As he went from school to school, the author was struck by differences in what he perceived to be the authoritarianism of the climate of each setting; he caught himself concluding that there was a direct relationship between the whiteness and the openness of schools in that particular metropolitan area. Obviously, however, his conclusion was unwarranted; a sample of three schools is far too small to justify such a sweeping generalization.

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*The above examples touch lightly on the misuse of graphs, charts, and statistics. For a more detailed, easy-to-read treatment, see Huff (1954).

**Some general factual claims, for instance those concerning physical and chemical properties, are sometimes verified without reference to sampling theory. This is because it is assumed that the properties being examined are stable. Human behavior, however, exhibits considerable variability. Correct claims about the opinions, beliefs, or social behavior of a single individual cannot be properly generalized to a larger population.

What if the author had visited half of the available secondary schools, had accurately assessed the authoritarianism of the climate of each, and had still concluded that whiteness and openness were directly related? Would his conclusion then have been justified? Of course, the answer depends on whether the schools visited were similar to the other schools. Steps could have been taken to increase the probability that the schools visited were typical of schools in the general area. One procedure would have been random selection. This does not mean that the visitor would wander about aimlessly until he came across a school, but rather that he would select schools through some random process such as pulling numbers out of a hat, or rolling dice. It is possible to obtain an atypical sample through random procedures, but the probability of doing so is reduced. Furthermore, procedures are available for determining the probability of random error.

A second procedure for increasing the probability of obtaining a typical selection is representative sampling. If information is available concerning pertinent aspects of each school, that information can be used to deliberately select a sample similar to the total schools in the area. For instance, if school size or socio-economic status of the neighborhoods is considered to be a pertinent factor, the sample of schools to be visited could be deliberately chosen so that school size and socio-economic status are in the same proportion as in the general population of schools which is of interest.

Now that we have briefly mentioned the importance of sample size and typicalness, can we make some judgment concerning the frequency with which claims about public issues meet these criteria? A candid answer must be somewhat discouraging. The majority of the general claims which we believe and act upon are based upon little more than casual observation, and it is unlikely that any sizeable proportion of those claims can be verified through very stringent sampling procedures. There are too many claims and too few resources for verifying them. As we have done before, we must now ask what should be our response to these constraints. And again, we caution against cynicism. To us, tentativity is the most fruitful attitude: Since we must act, we must also believe; but our beliefs ought to be subject to change upon the presentation of better evidence.

Assumptions

Specific and general factual claims based on inferences nearly always require that we make assumptions--that is, that we take some things for granted--and some of these assumptions lead to erroneous conclusions. During our earlier discussion on the misuse of data, we mentioned faulty implication of cause and effect--it is often assumed that because two events are contiguous in time or space, one is the cause of the other. A different political party comes to power, and shortly thereafter a war is ended. A new President is elected, and within months the country suffers a major depression. A radical black leader visits a city, and neighborhoods explode in riots and violence. It is possible that the new political party, the new President, and the visiting radical indeed caused the events which follow their advent. But it also is likely that the war, the depression, or the riots resulted from forces previously in operation (perhaps the same forces that led to the new party emerging, the election of a new President, or the riots). The elctions and visit may have been precipitating factors, or they may have only been coincidentally associated with the other events.

Actually, the causes of major political-social events are usually not simple. The assumption that a major social change has only one cause or that its cause can be identified easily is generally not tenable. Simple explanations can be used for political advantage and may even be used to unite people for good purposes, but if we seek genuine understanding of a complex event, we will be most often correct if we also seek multiple causes.

Other Assumptions

Assumptions about the relationship of group and individual characteristics are frequently the source of faulty generalizations: It cannot be assumed that what is true of a group will be true of each individual in the group, nor can it be assumed that what is true of the individuals making up the group is true of the group as an entity. Individuals who by themselves are calm, orderly, and rational can, in the heat of group spirit, exhibit all the characteristics of wild fanatics. Similarly, an institution which is humane and benevolent may harbor individuals who are cruel and stingy.

Another faulty assumption is that past or present trends will continue uninterrupted into the future. Common beliefs about the dominance of European culture and political power provide an example. From an historical perspective nations, subcontinents, and continents rise from obscurity to world eminence and over the course of time slide to obscurity. Each nation or people believes that their eminent position will continue forever. To date, no such trend has ever been maintained.

Analogies

Before closing this chapter, we need to examine a special problem in the verification of factual claims. There has been an unstated assumption that the claims under consideration are about events that have already occurred. Many of the most perplexing claims, however, concern the future. Obviously, there is no way to observe that which has not happened. However, it is important that we make fairly accurate claims about what is to come. Adequate consideration of any public issue requires judgment concerning probable consequences of alternative actions. In practice, predictions are often based on analogy--the alleged similarity of past and proposed events. How do we know what will happen if we pull out of Vietnam? We have no certain knowledge, but we can look to other wars in other places. Some people, for instance, claim close similiarity between the intentions of North Vietnam and the intentions of Hitler's Germany. They claim that without our presence, North Vietnam will do to Southeast Asia what Hitler attempted in Europe.

Arguments from analogy assume that situations are similar and that because they are similar in some respects, they will be in other respects. In dealing with analogies, one should determine: (1) In what way the situations are similar and different; (2) If the differences are important; and (3) If the similarities are relevant to the point the analogy is supposed to prove. It is apparent that no clear-cut answers can be given to any of these questions when dealing with claims such as the one that Hitler's Germany is analogous to Ho's Vietnam.

This is one reason why agreement concerning important policies is so difficult to achieve. If the evidence concerning the consequences of war, peace, manipulation of the national economy, giving or withholding federal aid to education, or forced integration of schools was more convincing, it would be easier to decide what we ought to do. Given the limitations of human understanding, we are constantly forced to operate without final knowledge, For that reason, conclusions regarding either specific or general claims should be thought of and stated in terms of the probability that they are correct. We are sometimes forced to act upon evidence which has a low probability of accuracy. That constraint cannot be fully overcome. It appears wise to recognize the absence of absolute knowledge and avoid duping ourselves into believing that we know more than we do.

CHAPTER SEVEN

ANALYTIC CONCEPTS: DISAGREEMENT OVER VALUES

It might be well to recall that the discussion of public policy--of political-ethical issues--often revolves around three related but distinguishable types of claims or disputes: questions of *fact*, questions about the *meanings of words*, and questions about the relative importance of *values*. The fate of a proposed policy may hang on the answers to any or all of these types of questions.

Although factual, definitional, and value claims can be distinguished and serve somewhat different functions in the analysis of controversy, they also serve a common purpose--persuasion. In particular, as we noted at the beginning of the previous chapter, value appeals intended to influence policy stands are often made implicitly though factual or definitional claims. Whether imbedded in other types of claims, or made openly, it is essential that value claims be handled explicitly in the analysis of political-ethical issues. However, before turning to some ideas for handling value claims, attention needs to be paid to the nature of values.

What are Values?

Values are our standards or principles of worth--that is, our ideas as to what is good, worthwhile, desirable. If you believe that freedom of speech is worth protecting, then that is one of your values. If you find jazz music pleasurable, then that is a value.

Not all values are equally relevant to public policy. Although it would be a mistake to claim that those values that are related to public policy can be clearly distinguished from those which are not, differentiations can be made which are less than clear cut, but still important.

Suppose that we tried to form a rough catalogue of standards--values--for judging the worth of an automobile. Different people would emphasize different values, but the following list would probably strike most people as being relevant, even if they did not give high priority to all of the items listed: speed, power, racy lines, ease of operation, smooth ride, ability to corner quickly, economy of operation and maintenance, high resale, safety, comfort. Now compare this partial list to values which might be relevant to deciding how to decorate and furnish a home: harmony between furnishings and architectural style; durability of furnishings; harmony between the uses to which the room will be put and the furnishings selected; the mood created by the furnishings--restful, energetic, cheerful, feminine, masculine; cost. Some of the values relevant to decorating a home are also relevant to buying a car--cost, economy, durability, the mood created. But others are not; for instance, we don't judge a home by its speed or cornering ability.

Does all this talk of cars and furniture seem out of place in the analysis of public issues? If so, that is just the point. Each person carries about a large assortment of values, some of which are clearly relevant to the discussion of public policy, others not quite so clearly relevant, and some perhaps not related at all. Making a few distinctions among values may be helpful before we present a partial list of standards which we think especially pertinent to public policy.

Classifications of Values

Values, like many other ideas, can be classified in numerous ways. We think it important to be aware of at least a three-way classification: moral, esthetic, and utility. *Moral values present standards for judging the ethical quality of human behavior.* The use of the word "ethical" to explain the meaning of "moral values" makes our definition circular, but hopefully, our examples of moral values, when contrasted with examples of esthetic and utility values, will clarify what we mean to include and exclude in each category. *Esthetic values are standards for judging beauty.* It makes sense to speak of the esthetic quality of a broad range of things: a painting, a human face or figure; a cat's walk, music, a backyard garden, a photograph of a political assassination. *Utility values are standards for judging function, for determining the approximation of actual to desired performance.* These definitions are bothersome because they do not clearly distinguish between standards of esthetic performance, moral performance, and other kinds of behavior. The definition of utility values is especially bothersome because what we are really trying to set up is a catch-all category for nonmoral and nonesthetic values, some of which refer to static rather than performance qualities. To help straighten out this possible confusion, we need to take a second look at previous examples and add a few more.

From our viewpoint, the partial lists of standards relevant to automobiles and home furnishings clearly contain both esthetic and utility values. Whether some of the standards listed are also moral values is not so apparent. A point which we will emphasize while examining our lists is that moral values carry with them implications of blame or guilt, praise or righteousness. Obviously, it does not make much sense to apply those terms to cars, chairs, and carpeting. When we examine the durability, speed, cornering ability, and economy of operation of an automobile, or when we examine cost, durability, and harmony between use and structure of furniture, we are clearly talking about standards and thus are referring to values. But only if we have some peculiar anthropomorphic view of inanimate objects do we tend to hold things morally responsible for the qualities they possess. If the standards listed above are not moral qualities, then what are they? They might be either esthetic or utility standards, depending on the beholder. For some people, speed is valued in an auto for strictly functional purposes--to get from here to there as quickly as possible. For others, speed is akin to beauty--they enjoy the sensation. For others, speed might be both a utilitarian and an esthetic standard.

Allowing for considerable ambiguity in the word "good", we nevertheless tend to classify answers to such questions as "What makes a good car?" as utility values. We also tend to classify answers to questions such as "What makes a beautiful car?" as esthetic values. But suppose that we ask "What sort of car should I buy?" This question emphasizes a person's behavior. A reasonable answer might be, "You should buy a car that meets these standards...", followed by a list of esthetic and utilitarian values. That statement may confuse the issue, because it makes it appear that esthetic and utility standards are also moral values; that is, they are values by which to judge not just the quality of the car, but also the behavior of the buyer. However, the buyer's behavior is to be judged by some implicit value (for example, it is good to apply certain esthetic and utility standards in purchasing a car), not by the esthetic and utility standards.

The above paragraphs may appear to be a devious approach to the question of values and public policy decisions. The point is that most controversy over public policy involves value conflict--most often conflict between or among moral values. At times, however, esthetic and utility values are also involved. For instance, in deciding whether the United States government should subsidize construction of an SST airliner, we expect someone to ask serious questions about the utility of an airplane that size: Will it fly that much faster than existing planes? Can it land and take off at existing airports? Can it be operated at a profit? We also expect people to ask questions reflecting concern with esthetic qualities: What effect will sonic boom have on those who live under flight paths? Will this be one more irritant in a none-too-restful environment? What about air pollution? Will it increase or decrease with the advent of mammoth jets?

Generally, even though esthetic and utility standards may be relevant to a public policy dispute, moral values are also involved. Esthetic and utility values seldom pre-empt moral considerations. For example, determining whether the noise level caused by SSTs is undesirable does not automatically close the question of whether the planes should be built. Neither does determining whether they will fly necessarily settle the issue. We might justify building a plane that probably couldn't fly, and if it did would be noisy, smelly, and unprofitable on the grounds that most citizens favored making the attempt--majority rule--or that building the plane would reduce unemployment--public welfare. We will argue later that certain moral values--such as those mentioned in the previous sentence--are particularly relevant to public issues in our society and should be deliberately included in the analysis of policy disputes even when esthetic and utility values are apparently relevant. Moral values have primacy over other values because we are at bottom interested in how men ought to behave.

The American Creed

Not only are moral values more pertinent to our purpose--the analysis of public policy issues--than are esthetic or utility values; some moral values are more relevant than others. If we asked "By what standards might the moral quality of a man be judged?", the following values would seem appropriate to many people: honesty, kindness, bravery, industry, thrift, religious belief, and so on--we might even quote the Boy Scout oath. A similar list might be appropriate for judging a nation. But if asked "By what standards can the worth of public policy be judged?", terms like "honest", "kind", and "brave" don't seem to make quite as much sense. We sometimes hear a law denounced as cowardly, cruel, or crooked. It is more common, however, to judge public policy in the United States by what Gunnar Myrdal calls the American Creed, characterized by terms like "equality of opportunity", "freedom of speech, press, and inquiry", "due process of law including the right to be secure in person and property", "right to privacy", and "freedom of religion". This list is by no means complete, nor do we claim that these values are more relevant than other standards to every policy dispute. We do claim that, as a general rule, thinking about political-ethical issues ought to include the consideration of possible conflicts between or among values in the Creed. For us, the Creed is of central importance because it helps define our conception of the dignity of man. A society which is not concerned with protecting speech, inquiry, freedom of religious belief, privacy, etc., significantly reduces the individuality and dignity of its members.

We do not construe the values in the Creed as absolutes. Equality of opportunity, for instance, is neither supported or restricted to the same degree in each application of any policy, nor is it completely destroyed or fulfilled by a single policy. It is, therefore, important to estimate the *degree* of congruence between an important value, a policy, and a specific application of the policy. Using values to determine the worth of policy is more complex, however, than estimating the degree of consistency between a value and proposed legislation because value conflict itself is more complex.

Value Conflict

In applying values to justify public policy, it is usually the case that any one decision will be supported by one or more values as well as opposed by one or more values. That is, the decision would enhance some values and be detrimental to others. This conflict between values when applied to specific situations is at the heart of public controversy. For the frames of reference of different people emphasize different values and varying interpretations of the values. Unraveling these conflicts is a complex matter.

One type of value conflict is inconsistency between general and specific values related to the American Creed. We need to explain, therefore, what we mean by general and specific values. Freedom of speech is a general social-political value in our society which is considered basic to our conception of the dignity of man. Nearly every American claims some degree of allegiance to free expression of opinion. In some specific settings, however, curtailment of political opinion is approved; for instance, in-class expression of radical--especially leftist--political views by public school teachers almost always brings reprisals. A similar situation prevails in the armed forces where pacifist or other anti-military statements are hardly encouraged. Although freedom of speech is a general, basic value applicable to a broad range of persons, our actions in specific situations sometimes belie our commitment. Equality of opportunity is another general value basic to our conception of man. Again, most of us claim to believe in the general expression of this value, but when it comes to certain specific applications, such as marriage and housing, other values which are less basic or less general determine our behavior--racial purity, the esteem of friends and neighbors, or social status.

Value conflict is not limited to specific versus general values, nor are specific values always inconsistent with general values. However, the distinction between general and specific standards of conduct is essential if we are to recognize why value conflict is a complex matter.

Value conflict can be construed along two dimensions: one focusing on the person(s) involved; the other focusing on the types of values involved in the inconsistency. In terms of the first dimension, conflict occurs both among people and within individuals. In the second dimension, conflict can occur between specific values, between general values, or between a general value and a specific value. The values in conflict may be esthetic, utility, or moral values. The following discussion of one aspect of violence in the inner city illustrates both dimensions of value conflict.

The inner core of a certain metropolitan area contains businesses and industries controlled largely by whites. This core is surrounded by a black population belt which in turn is surrounded by a broad outer ring of white suburbs. Many of the whites who live in the outer ring own businesses or are employed in the inner core. Shops and stores in the core are subject to increased incidence of vandalism and violence, most of it purportedly the work of black juveniles. Some areas which bustled with shops and restaurants a half dozen years back have been all but abandoned, their owners fleeing to the "safe" suburbs. Pressure is mounting for more police protection and a get-tough policy in the inner ring. This policy, however, touches off severe controversy concerning conflict in basic socio-political values.

Proponents of tougher police action support their plea by appealing to the right of citizens to protection from violence to both their property and persons--one of the basic expectations in most, if not all, political systems. Those who fear a get-tough campaign are concerned with equal treatment under the law and due process of law. They distrust the police, believing that if given a free hand policemen will treat black suspects far more harshly than whites, thereby violating the principle of equal treatment for all citizens. Some blacks and white liberals also believe that unless the police are restrained, young black offenders will be subjected to treatment usually reserved for adults, thus violating accepted procedures which differentiate between those who are and are not of age.

The example cited above is not unusual in that persons on each side of any policy dispute can appeal to deep-rooted values to support their position. What is often not so readily recognized is that people who appeal to one set of values and reject another in one situation will often switch positions in a different setting. A man who lives in the suburbs and owns a clothing store in the inner core might understandably appeal to the rights of property and be less concerned for due process of law when his business is threatened by young vandals. But suppose that his own son is seriously wounded or killed by a shotgun blast fired by a farmer protecting his watermelon patch against a friendly raiding party. Even if the farmer was driven to desperation by the threat to his livelihood of repeated watermelon raids, the father will not likely admit that protection of property should take precedence over due process of law in this instance.

Two points are illustrated in these examples: (1) Value disputes often occur between or among individuals; and (2) individuals often switch value positions from one setting to another. An important additional point is that value conflicts often occur within an individual--not just among persons--and that inner value struggles also shift from setting to setting. In order to explain why value commitments shift from one situation to another, we must tie together several notions about the nature of values and value conflict.

The vast majority of us believe in a common core of somewhat vaguely defined contradictory values. Several points in the previous sentence need to be stressed: (1) the common core of values; (2) the vague definition of basic general values; and (3) the incompatibility within our total set of values. Conflict cannot be adequately explained in terms of some people believing in one set of values and other people believing in another set. Rather, all of us believe in a similar set of values, but give individual values different emphases in different settings. That is, we all believe in the same general core of values, but are not committed to the individual values to the same degree.

One reason that so many people with diverse backgrounds, needs, and aspirations can claim allegiance to a common creed is that the components of the creed have vague definitions. We all believe in freedom of speech, but disagree on whether its definition should include the right of communists to teach in the public schools, the right of publishers to print erotic literature, or the right of children to shout obscenities at each other on school playgrounds. Conflict occurs not only because the degree of commitment to each value differs from person to person and because basic values are defined vaguely, but also because implementation of some values requires restriction of others; there is conflict built into the total framework of values to which we are committed.

For most of us, commitment to a value is not absolute. If it were, the incompatibility among our values would place us under tremendous strain--assuming that we were aware of the conflict--because we would constantly be forced to make impossible choices between values to which we were completely committed. Fortunately, when most people choose a value such as freedom of speech over public safety in one setting, their choice does not mean they must feel committed to policies protecting free speech in all settings, nor that they will never feel free to favor public safety.

Our commitment, then, to a common core of inherently incompatible and vague values both requires and makes possible shifts in value choice from setting to setting. In order to be perfectly consistent in all our value choices, we would have to give up some of the values which most of us believe are very important. Privacy, for instance, is not always consistent with national security. It makes little sense for us to claim to hold to both privacy and national security unless we actually choose one in some settings and the other in other settings. Incompatibility among important values requires that we either shift our value choices from setting to setting or give up some values. The vague definitions of our basic values make possible shifts.

Recognizing Value Conflict

People are often aware only of the values that support their decisions, and often are unaware of the inconsistent application of values from one situation to another. If our students' rationality--in the sense of explicit reflection upon the important aspects of an issue--is to be strengthened, then it is important that they be able to identify basic social and political values in the American culture and indicate how they bear on a given political-ethical dispute. Rather than to argue explicitly on the level of "facts" and only implicitly on the level of values, they should be helped to identify the conflicting values in an issue and state explicitly which values support and which oppose each side to a dispute. In our experience, students cannot do this without instruction and practice. Recognition of value conflict, whether between persons or within an individual, or whether between specific or general values, is dependent upon the ability to explicate relevant values. Of course, rational handling of value conflicts is in turn dependent on the ability to recognize value conflict.

Value conflict occurs when people agree on the consequences of a proposed policy, but not on the goodness of the consequences. Presidents Johnson and Nixon have claimed that anti-war demonstrations encourage the North Vietnamese and Viet Cong to continue their struggle against the United States and South Vietnam. It is quite possible that leaders within the North Vietnamese government agree with the American Presidents that increased morale among the communists is indeed one consequence of dissent within the United States, but they hardly agree on whether that dissent is good or evil.

Additional illustrations can be given which focus on the Vietnam War. The example which follows does what we want students to do--explicate the conflicting values. During the Fall of 1969 a series of anti-war demonstrations was planned. The first was the October 15th Moratorium. Students at one midwestern university agreed to conduct themselves peacefully during the first moratorium, restricting their activities to appeals to students, professors, and administrators to suspend normal university functions and devote the day to discussion of the War. Many of the more militant students, however, stated that they had little faith in the impact of peaceful demonstration and voiced their intention to use violence to force the university to shut down completely during a second moratorium--using the first only to demonstrate the futility of nonviolent means. These students believed that the War would not be brought to a halt until the nation--its schools, businesses, industries, and government agencies--was forced to close shop. They also believed that if a small minority were willing to risk their bodies in violent confrontation with the establishment, many others would soon follow and swell the ranks to a formidable army able to force its will on those less committed.

Understandably, these ideas met with more than a little resistance. There were those who believed that even if the action advocated by militant students was successful in ending the war, it would lead to consequences even less desirable than Vietnam--that it might so disrupt the nation that our present form of democracy, with its liberal guarantees of basic rights, would be destroyed. When faced with this possibility, the militants claimed that ending the war was far more important than preserving our present civil liberties. They were quite willing to risk the destruction of freedom of speech and due process of law in order to end what they considered to be a monstrous evil.

The values in conflict were peace on the one hand and certain civil liberties on the other. That the conflict was genuine is indicated by the fact that each side agreed on or was willing to stipulate the likely consequences of their actions and still disagreed on which consequence was to be preferred.

Handling Value Conflict

Despite considerable opinion to the contrary, there are rational ways of handling value conflict. The analysis of an issue need not end with disagreement over the desirability of the probable consequences of public policy.

Factual issues and language problems are both relevant to value conflict. Before dismissing a dispute as being an unresolvable disagreement over values, we ought to ascertain whether the disagreement is indeed a value dispute or whether it only appears to be one.

Factual issues sometimes appear to be value conflicts, especially when they are couched in vague language. The following brief dialogue is an illustration: Two men are discussing the merits of welfare payments to the poor. One claims, "If we continue to give welfare to everyone who moves to the city, we'll simply encourage people to flood our metropolitan areas to avoid work!" The other rejoins, "I think we ought to give welfare to everyone who needs it. We ought to be concerned first with human needs, not with motives."

At first glance,it appears that the men have a value dispute, and in fact they might. But if they are serious about analyzing the welfare issue, it is far too early for them to claim that their value differences are irresolvable. A more profitable move would be to clarify key assumptions underlying each one's position. The first man might be assuming that most welfare recipients are able bodied "outsiders" who come to the city to receive a handout, and that they prefer a handout to productive work when given a choice. Getting such assumptions out in the open and suggesting reasonable alternative assumptions might be enough to change his position. Additional information about the age, health, and prior residence of people on welfare and additional information concerning the consequences of either continuing or curtailing present welfare programs might cause either person in this dispute to change his stand.

Factual issues and language problems are, then, relevant to value disputes; clarification of vaguely stated factual claims helps uncover and resolve apparent (non-genuine) value conflict; and, additional information concerning relevant claims about the past or present and additional information concerning probable consequences can help resolve genuine value conflict by changing the emphases discussants place on key values.

Language problems are also relevant to value conflict in another way: Appeals to values often use language with strong emotive loading. It is possible that a person's commitment to a given value in a specific dispute is largely dependent on the words chosen to express the value. If so, one way for discussants to move from apparently inflexible value positions is to "defuse" the language in which the value is stated.

An emphasis on rational analysis calls for restating key values in relatively non-emotive terms. Instead of decrying the erosion of inalienable rights of free and sovereign states, we might ask specifically, "What were the states formerly able to do which they cannot do now, and vice versa?" and, "What are the consequences of the change over time?" Instead of bewailing the totalitarian restriction of the freedom of speech of our young men in the armed services, we could inquire, "What can a civilian say or write that a serviceman cannot?" and,"What effect does the difference have on the men involved, or on our society as a whole?" A less emotive approach to the discussion of values will tend to free-up positions which appear to be rigid.

Beyond Facts and Definitions

Rationale consideration of value conflict must often go beyond factual and language issues. It is always possible that people who understand clearly each other's position, are not abusing the emotive loading of language, and have a reasonable grasp of and agree about the facts related to the issues will still not agree about the merit of a proposed policy. In other words, they are really caught in value conflict. When this occurs, three additional strategies can be helpful: *(1) A dispute over which value to support can sometimes be settled by determining if a policy in accord with one of the values will support a third, higher value. (2) Sometimes a policy can be found that supports both values. (3) Considering contrasting situations in which the same opposed values are imbedded, but in which discussants might switch their support from one value to another, sometimes causes people to readjust their original value commitments.*

Appealing to a higher value. A discussion with a young college student revealed how an individual can appeal to higher values to resolve value conflict within himself. This young man had decided not to participate in future demonstrations against U.S. involvement in the Vietnam war, but his decision had not been particularly easy. He valued human life and thought that our presence in Vietnam needlessly increased suffering and death among civilians and military forces. He was convinced, however, that peaceful and orderly protest in the United States would not bring the war to a halt; that radical, disruptive, perhaps even violent protest was needed. He hesitated to take part in disruptive protest for fear that if it reached an effective level of violence, the future of democratic institutions in this country would be damaged. On the one hand, then, he valued peace and the preservation of human life. On the other hand, he desired to protect his vision of democratic due process. The resolution of this inner conflict took a rather odd turn. This boy was convinced that participation at an effective level of protest would jeopardize his education. He came from a lower class, white family, had no financial resources to fall back on if he dropped out or was expelled from college, and decided that personal security was more important for him than ending the war.

The boy's decision was not odd in one sense; most of us have decided at one time or another that our personal welfare was more important than participation in a cause which might affect the direction of events in our society. We, therefore, ought to be able to understand this decision. It might seem odd, however, that we would offer this case as an example of a value conflict which was resolved by appeal to a *higher* value. The oddness of the example is due to ambiguity over what we mean by the word "higher".

Generally, we would advise people to resolve value conflict by appealing to a value which is higher in the sense of being a political-social value basic to the dignity of man. But when we do that, we are really trying to tell others how they *ought* to resolve conflict, rather than telling them how conflict sometimes *can* be resolved; we are making normative rather than descriptive claims. Our present purpose is to describe a process, rather than to advocate a particular application of a strategy. The strategy works whenever an appeal is made to a value which is higher in the sense of being more important to the person(s) caught in the conflict. In our example, personal security was a higher--more important--value to this boy.

The following example illustrates how this strategy can be used to resolve value conflict between individuals. Suppose that an advisory board on highway construction was attempting to arrive at a general policy concerning the best location for expressways that cut through cities. Someone on the board has suggested that highways ought to cut through slums rather than through well maintained suburbs. Those who favor this position claim that the resultant removal of slums will improve the safety and appearance of the metropolitan areas. Opponents of this policy claim that it will bring hardship on people who are least able to cope with it--the poor. If the value conflict between the board members became fixed at this point, it would be between the safety and appearance of the inner city on the one hand and concern for the welfare of poor people on the other. Appeal to a higher value--equal treatment of persons--might free the deadlock. Most of us--rich, poor, or in between--do not want our neighborhoods destroyed for freeways. Building the majority of new highways through slums violates equal treatment by systematically imposing an undesired condition on a single element of society rather than distributing it among all elements. Of course, we cannot guarantee that the value chosen for illustration would convince an actual board, but the general strategy of appealing to a more important value is sometimes effective.

Finding an alternate policy. Often a third higher value cannot be agreed upon. This would happen in the above example if some board members thought that equal treatment of persons was not as important as getting rid of slums. Sometimes a third higher value provides little assistance because of its vagueness. To us, for instance, the dignity of man is very important, but also very vague. Appeals to it have little meaning unless they are set in the context of other more specific values such as the traditional American civil liberties.

When appeal to a third higher value does not work, sometimes a policy can be found that supports both values. Members of the highway policy board might have agreed that it is important both to get rid of slums and to refrain from bringing additional hardships on the poor. It might be possible to satisfy both values by altering the proposed policy to include adequate resources for relocating displaced families in suitable housing which they can afford. This particular proposal is not presented as the best way to handle slum clearance or highway construction. It is, however, an example of how an alternate policy might satisfy what appear to be conflicting values.

Considering contrasting situations. Considering contrasting situations in which the same opposed values are imbedded, but in which the individual would support a different value from one situation to the next is sometimes helpful when faced with a value conflict. It provides a basis for asking why an individual supports one value in one situation but a different value in another situation. This might make him aware of his inconsistency, with the result that he will decide to be consistent in supporting one value; or, it might reveal acceptable reasons (e.g., significant differences in otherwise similar situations) for shifting support from one value to the other.

In the case of the highway advisory board, the use of this strategy might begin with questions which probe the commitment to making cities safe and attractive places to live. It might be pointed out that safety and beauty are not just physical attributes of a city; that is, they cannot always be changed by tearing down old buildings and constructing new ones. Crime and violence are not unknown to new redevelopment housing projects. Nor is a new project immune to unkept grounds, broken windows, and excessive litter. Relevant questions, then, are: Assuming that replacing slums with freeways won't cure urban blight, is our support of safety and beauty in the inner city only rhetoric? How important are these values to us? Are we willing to support other feasible, but expensive, proposals? Are we willing to pay for better police protection? For better street lighting? For better education and rehabilitation programs? Can we support greater job opportunities for the poor by making union membership more readily accessible to blacks? By providing meaningful training programs which actually lead to employment? Will we support programs which make it easier for the poor or minority groups to own houses? There are factual assumptions underlying these questions; assumptions which can and ought to be probed. But the purpose of the questions in this instance is to probe the degree of commitment to a value. This type of probing can best be done if questions about the factual accuracy of the contrasting situations are held in temporary abeyance.

The strategy of considering contrasting situations can also be used to test the consistency and degree of commitment to not placing undue hardships on poor people. It might be pointed out that war and the draft seem to weigh more heavily on the poor than on the economically comfortable. Are we willing to change induction laws so that privileged youth, such as college students, share equally with the underprivileged in military service? Our electoral process also seems to discriminate against the poor; it costs money to run political campaigns. Are we willing to use tax money to pay campaign costs so that poor candidates can compete on more equal footing with wealthier ones? Are we willing to do this if poor or minority group candidates turn out to be far more radical or less "respectable" than their middle or upper class opponents?

Notice that the contrasting situations embodied in the questions in the above paragraph are farther removed from the original discussion--highways and housing--than the questions in the previous paragraph. We believe it useful to consider situations which are nearly identical as well as ones which are similar only in that the same general value or values are applicable. Considering situations which have varying degrees of similarity and contrast helps us to locate the point at which we are likely to shift our value commitment.

Conclusion

Our discussion in the last several chapters of concepts and strategies for resolving conflict might inadvertently lead to two beliefs which need to be discussed: (1) Conflict is bad and ought to be eliminated, and (2) The process of analyzing political-ethical conflict is to be valued as an end rather than a means.

Conflict can neither be eliminated nor avoided, nor is it an unmixed evil. Our commitment to democratic process is in large part a commitment to the perpetuation of political diversity. Part of our notion of the dignity of man includes the right not to be like every other man, the right not to conform to a single standard of political belief and conduct. That we wish to perpetuate a large measure of political diversity means that we value political conflict.

That does not mean, of course, that all forms and degrees of conflict are desirable. The expression of conflict must have some limits, but those limits cannot be set once and for all. For us, the rational analysis of public issues can provide continuous reasonable reaction to the strains of political diversity, and readjustment of the forms and bounds of its expression.

The process of political-ethical analysis is valued, but not first as an end in itself. It is not merely a mechanism for controlling diversity. We expect the examination of significant issues to yield products--reasoned decisions as to what ought to be done about important societal problems. We do not expect each reasonable person to come to the same conclusion, but we do expect rational analyses to yield qualified decisions which take into account the likely or possible negative as well as positive consequences of the policy supported.

CHAPTER EIGHT

THE OUTLINE OF CONCEPTS

The previous chapters have presented a discussion of an intellectual framework for thinking about public issues. Actually, that discussion is based on what we believe to be a more useful curricular product because of its specificity--an Outline of Concepts for the Analysis of Public Issues. It was one of the premises of the U.S.U. Social Studies Project that general discussions of reflective thinking competencies are of limited use to the teacher or other curriculum developer. Such general discussions must be converted to systematic listings of specific concepts or ideas to be learned by the students before teaching strategies and materials can be developed.

In fact, the U.S.U. project personnel developed the Outline of Concepts prior to preparing the narrative description of the concepts found in the preceding chapters. This Outline was then used as the basis for the preparation of the teaching suggestions to be presented later, and as the basis for the narrative discussion. The Outline is, then, in a real sense the skeleton upon which our curricular materials were built, and around which the previous discussion was laid.

Before presenting the Outline, some comments are in order. To begin with, we do not assume that the concepts in the Outline present an infallible logical or empirical model for thinking about public issues. Beginning with the earlier Harvard Project, the concepts have been selected on both rational and empirical grounds. That is, rational grounds came from our reading of various works in logic, semantics, argumentation, and ethics and discussion among the members of our staff of the dimensions of public issues. The grounds were empirical to the extent that we "tried out" different concepts on each other and on people outside the project, or observed others discussing issues, to determine which concepts helped to clarify and expedite the decision-making process.

There was no pretense that we were developing a completely comprehensive, logically airtight set of concepts. We were concerned, however, with identifying the major factors likely to expedite or interfere with intelligent discussion and decision-making about public issues. This means that the Outline is meant to be open-ended. Much of the Outline is based on the earlier work of the Harvard Project. In addition, it was criticized by competent consultants* and the ideas were tried in teaching settings with high school students. Nevertheless, we still consider the Outline to be subject to change.

The development of such a set of concepts is an intellectual task which can never be fully consummated. Despite the time and effort which have gone into the Outline's development, and despite our belief that the concepts in it have a great deal of validity for the analysis of political-ethical issues, some people may think that we have overlooked basic concepts, and they may wish to include these in their curricula. Others may even wish to exclude from their teaching concepts which they think provide little help in the analysis of public issues.

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*Such as Michael Scriven, Lawrence Metcalf, John Haas, William Stevens, John Robinson, some of whose suggestions for changes we were not able to accept.

It should also be noted that the order in which concepts are presented in the Outline has no intrinsic logic to it. An attempt was made to build into the Outline an "accumulation of meaning." That is, broad concepts are presented first in the Outline as the basis for the more specific concepts presented later.

In line with the idea of going from the general to the specific, the Outline begins with a definition of political-ethical issues, the analysis of which is the total thrust of the Outline. Next, attention is directed to the need which humans have for orderliness, and the ways in which this need may affect our considerations of public issues. The functionality and dysfunctionality of the perceptual sets we develop to select and order the many sensations impinging upon us, as well as our psychological mechanisms for handling inconsistencies in our belief systems are stressed. Emphasis is also placed on the influence which our frames of reference have on our thinking and behavior. Then, consideration is given to some ideas about language, our basic tool for thought and communication. After these underlying concepts have been presented, the Outline turns to the consideration of specific problems to be faced in discussing and thinking about public policy--the definitional, factual, and value issues that must be recognized and handled in coming to a defensible ethical position.

Although we believe this is a developmental sequence which assists in the comprehension and use of later concepts in the Outline, there is no tight logic which has governed that development. We have followed the sequence in our development of materials and suggestions for teaching the concepts. There is, however, some question in our minds as to whether this is necessarily the best order in which to teach the ideas. It could be, for example, that it would be more effective to introduce the students to factual disputes and the difficulties of establishing the veracity of various claims, and then present the clusters of concepts dealing with perceptual sets and frames of reference which provide groundwork for understanding why it is that even conscientious people err in their observations and reports. Or, perhaps students should first be introduced to value conflicts and then presented with the relevant concepts in regard to how people handle cognitive dissonance. These questions about the order in which the concepts should be taught are empirical in nature. That is, various orders need to be tried out and the effects assessed.

There does not seem to be any overriding reason to presume that our tendency to move from the more general, foundation concepts (concepts which provide underlying understanding often without direct applicability to political-ethical issues) would be any less effective than the strategy of moving from specific concepts to the foundation concepts. It should be noted, however, that the point at issue here is not whether concepts can best be taught by providing specific exemplars. In every case, we attempted to teach the concepts by moving from the familiar and concrete to the abstract, providing examples and illustrations (experiences for the students when possible). The question is whether it is more effective to lay a groundwork of broad concepts and then introduce more specific concepts which draw on that foundation, or to introduce the specific concepts and use this as a motivational base from which to present the broader concepts as explanations.

With this brief introduction, we present the Outline of Concepts for the Analysis of Public Issues developed by the Project. It might be well to remind the reader again that the Outline is the skeletal frame for the discussion of the analytic concepts in the preceding chapters and is presented on the assumption that this briefer format is more useable in teaching and curriculum development than a narrative discussion of the concepts. This skeletal presentation allows an easier matching of the concepts to the teaching suggestions presented later in this report, and provides an accessible format for scanning the concepts to evaluate them or as a basis for one's own curriculum work.

OUTLINE OF CONCEPTS FOR
THE ANALYSIS OF PUBLIC ISSUES

I. Making decisions about public issues is basically a matter of ethical analysis.

   A. Ethical analysis is the process of making decisions about serious questions as to proper aims or conduct.

   B. Public issues, as opposed to private questions, involve decisions about what the aims, i.e., the goals of our society, should be and about the individual actions and governmental policies to attain the goals.

   C. Making decisions about the aims and policies of the society, then, is a matter of political-ethical analysis--i.e., ethical analysis about decisions to be carried out in a political context.

II. The general need for orderliness which people have affects their understanding and consideration of public issues.

   A. Humans impose order on the sensations they receive.

      1. There are more stimuli than we can handle; some selection and ordering are necessary.

      2. Each individual develops perceptual sets, i.e., expectations as to what he will sense, as well as predispositions to have positive or negative feelings toward much of what he perceives.

         a. These sets and feeling predispositions are based on past experiences and on our needs and desires.

         b. These sets and feeling predispositions lead us to perceive *and* remember only parts of situations we are in, and they lead different people to perceive the same events differently.

c. When we are frightened or threatened or deeply committed, what we perceive or feel is particularly likely to be selected or biased by our needs and desires.

d. Sets and feeling predispositions help us to deal with the world, but they can hinder us if they are inflexible, they can keep us from perceiving relevant things, or lead us to perceive things in a distorted manner.

B. Individuals strive toward consistency among their beliefs, values, and actions; recognized inconsistency is uncomfortable.

1. Most decisions and actions have positive and negative elements.

a. In particular, opinions and behaviors are often justified by values incongruent with other values held by the same individual.

b. Inconsistent decisions and behavior are often unavoidable from one situation to another.

2. Among the ways in which people try to handle inconsistencies among their beliefs, values, and actions are:

a. Actively avoiding situations and information which are contrary to what is believed or to action already taken;

b. Reducing the importance of the contradictory situation, information, or source of information;

c. "Compartmentalizing" and not admitting the relevance of contradictory knowledge or values;

d. Rationally weighing the reasons for inconsistency, and either accepting it or changing the belief, value, or action.

3. Decisions about public issues will be more realistic if inconsistent elements are handled rationally.

C. Each person has a *frame of reference*--i.e., views of what the world is like, what is possible, and what is desirable.

1. This frame of reference is made up of perceptual sets and feeling predispositions, as well as our beliefs and values.

2. Individuals have different frames of reference.

3. Whether we are aware of it or not, our frames of reference determine how we act and think, including our considerations of public issues.

4. The parts of our frames are not always consistent with one another.

D. One's frame of reference is the source of assumptions--beliefs or values taken for granted, often without being stated--which underlie our political-ethical decisions.

  1. Assumptions are necessary and unavoidable.

  2. Although everyone makes assumptions, our assumptions are often not recognized by others or ourselves.

  3. It is important if discussion is to be fruitful or if issues are to be adequately analyzed that one's own assumptions, as well as those by others, be recognized, brought into the open, and clarified.

    a. It is necessary to make some assumptions in order to carry on a dialogue; all of these cannot be examined or discourse would break down.

    b. Assumptions should be examined when they are important to making conclusions about the point under consideration.

III. Language is of central importance to the analysis of public issues because it provides the basic means for thinking and communicating about public issues.

A. Language helps us to have ideas and to think.

B. Language is the most commonly used form of communication about public issues.

  1. Some communication takes place by non-verbal means.

  2. However, language performs important functions that can *rarely* be accomplished by non-verbal means of communication.

    a. It helps people to communicate despite the difficulties introduced by spatial separation.

    b. Language helps us to communicate despite separation by time.

    c. Language allows us to communicate complicated thoughts.

C. An understanding of the nature of words is important to the analysis of public issues.

  1. Words are symbols--that is, they stand for or represent other things (including ideas).

  2. There is no natural relationship between any word and that to which it refers.

  3. Words and other symbols can have descriptive meaning, emotive meaning, or both.

a. Descriptive meaning refers to the information provided by a word, a group of words, or some other symbol.

b. Emotive meaning refers to the feelings aroused by a word, a group of words, or some other symbol.

4. For different individuals, a word, a set of words, or some other symbols may have the same descriptive and emotive meaning, the same descriptive meaning but different emotive meaning, or the same emotive meaning but different descriptive meaning.

D. Language problems can interfere with communication and thinking.

1. Communication and thinking will break down if we fail to understand and agree upon the meanings of words being used.

a. Words may be used that are ambiguous--i.e., more than one meaning is plausible in the given context--and/or vague--i.e., we can only partially tell the meaning in the given context.

1) Words may be ambiguous and/or vague in their descriptive and emotive meanings.

2) Figurative language is especially likely to be ambiguous and/or vague.

b. Words may be used inconsistently--i.e., word meaning may shift.

c. New unfamiliar words may cause difficulty.

d. Cultural differences may cause people to misunderstand the descriptive and/or emotive meanings which words have for other people.

2. The emotive loading (i.e., the emotional meaning) of words and other symbols may interfere with communication and thinking.

a. It may cause us to disagree with the speaker or writer to a greater degree than we otherwise would.

b. It may cause us to agree with the speaker or writer more readily than we ordinarily would.

c. People's reactions to the emotional loadings of language may be so severe that communication becomes difficult or impossible or thinking is curtailed.

d. Propaganda techniques such as name calling (attaching a label with negative emotional loading to a person, idea, organization, etc. to influence people against it) and the use of glittering generalities (connecting a word with positive emotive loadings, such as "American way," with an idea, person, organization, etc. to be promoted) use the emotional loadings of language to influence our thinking.

   e. Figurative language frequently has heavy emotive loading.

3. Our reactions to general terms sometimes interfere with communication and thinking.

   a. In reacting to stereotypes, we sometimes forget that people categorized with a label such as "Catholic", "Democrat", or "farmer" are different in many respects.

   b. Emotively loaded class names commonly used in discussing public issues are especially likely to lead people to react to oversimplified categories.

   c. We sometimes forget that people and things change even though their names may not.

IV. There are three major types of problems to be dealt with in thinking about and discussing public issues.

A. Language and word misunderstandings present a major problem in political-ethical analysis.

1. In discussions, people often do not say what they intend to say, or what they say is misheard or misinterpreted.

   a. Repeating what you think the other person said and obtaining his agreement will help to determine that you understood him correctly, both descriptively and emotively.

   b. This repetition and clarification may also help the original speaker to recognize that he did not say what he intended.

   c. Caution must be exercised because restatement is sometimes used to shift the first speaker's position, rather than to clarify it.

2. Often discussants use the same word to refer to different things (ambiguity) or use different words to refer to the same thing, or the meaning of a word or words being used is not clear to at least one of the discussants (vagueness).

   a. Once this breakdown in communication is identified, the next step is to clarify the meaning of the word or words, usually using one of several different ways of defining words.

      1) A dictionary may be consulted.

      2) The discussants may develop their own definition.

         a) Definition by example (pointing definitions) may be used.

            (1) Examples not included (i.e., not intended to be encompassed by the definition) may be specified.

        (2) This type of definition is especially useful when the referent is physically present.

        (3) Even then confusion may occur over those characteristics of the referent that are meant to define the word.

    b) Definition by synonym may be used.

        (1) Presenting antonyms may also be helpful.

        (2) Care must be exercised because no two words have exactly the same descriptive and emotive meaning.

    c) Definition by specifying characteristics (criterial definitions) may be used.

        (1) The characteristics of those things to be referred to by the word are listed.

        (2) Characteristics not included in the word's meaning may be specified.

        (3) The definition may proceed from genus to differentiation.

        (4) This type of definition is especially useful because it tends to make evident the particular points of difference over the meaning of a word.

b. Often the problem is not just a matter of clarification, but that the participants cannot agree on the meaning to be assigned a word.

    1) It is important, then, to remember that there is no natural meaning for a word.

    2) The various types of definitions may be used to try to clarify meaning and reach agreement on how to use a word or words.

    3) When agreement cannot be reached otherwise, a definition can be stipulated for the discussion.

    4) Care must be taken, especially with stipulated definitions, that word meanings do not shift during the course of a discussion, even after careful definition.

c. Certain cautions should be followed in arriving at definitions.

    1) Although there is no natural relationship between a word and its referent, it is often helpful if a conventional definition is adopted so that little "translation" is needed during the discussion.

2) Whenever possible, the most functional definition of the word should be chosen--i.e., the definition that is most fruitful in aiding thinking and discussion.

3) It is just as important to pay careful attention to emotive meanings as to descriptive meanings, both in identifying points of difference or difficulty in word usage and in definition, as these will often cause breakdowns in thinking and communication.

   a) While descriptive meaning can be identified rather precisely, it is more difficult to identify emotive meaning and to specify it for purposes of definition.

   b) It is important to remember, especially when using a stipulated definition, that agreement on descriptive meaning does not insure agreement on emotive meaning.

   c) Loaded definitions--i.e., definitions using emotively loaded terms supporting one side in a controversy--should be rephrased to neutralize the emotive loading to the extent possible.

3. Once a word has been defined, the problem of determining whether specific individuals, events, etc. should be classified under that label is am empirical one.

   a. The problem is to determine whether the thing to be classified has the requisite characteristics.

   b. Sometimes finding that something does not fit the definition may lead one to change the definition so it will be more suitable.

B. Settling factual disputes is a major problem in political-ethical analysis.

1. Ethical disputes often involve disagreements over the present state of affairs, what led to it, and what the consequences of different policy decisions and actions are likely to be.

2. In thinking about and discussing public issues, one is likely to have to deal with *specific factual* claims and *general factual* claims (generalizations).

   a. Specific factual claims are assertions about what is true of a particular person, thing, or event at a particular time in a particular place.

   b. General factual claims are assertions about what is true of all or almost all of the members of a group of people, things, or events.

        1) General factual claims may be based on a number of specific factual claims or on other general factual claims.

        2) Sometimes each of the persons, things, or events in the group is examined and the general factual claim is a summation of specific claims.

        3) When only a sample from the group is examined or when the claim goes beyond the examination of each member of the group, the general factual claim involves an inference.

    c. Legal claims, assertions about the state of the law, may be either specific or general.

3. In trying to verify either kind of claim, careful attention to language is important.

    a. The language used to state the claim should be clarified to be certain that the description of the claim and any points of disagreement are clear.

    b. Emotively loaded language may affect one's willingness to accept or reject a claim.

4. The verification of factual claims requires special attention to evidence.

    a. Our information about past events is always limited and fragmentary, and any witness is likely to have some accurate and some erroneous information.

    b. It is important to ask questions about the observations upon which statements to be used as evidence are based.

        1) Has the observer the relevant expertise, based on education or experience, to make the required observations?

        2) What biases or sets does the observer have that might have interfered with or influenced his observations?

        3) Was the observer's emotional state such that it might have interfered with or influenced his observations?

        4) Does the observer have a history of accurate observations?

        5) Do the observations agree with those of other independent observers?

    c. Questions must also be asked of the report.

        1) What are the time and space relationships between the reporter, the event, and the statement of the event?

        a) Was the reporter an eye witness or is he reporting on the basis of someone else's observations? (Distinction between primary and secondary sources of information.)

        b) If the reporter was not an eye witness, does he tell who his source is?

        c) If the reporter is not an eye witness, is his source (or sources) reliable?

        d) If the reporter was not an eye witness, did he get his information directly from an eye witness?

        e) How soon after his observation of the event or after being told about the event did the reporter make his statement about it?

    2) What biases does the reporter have--judging from his background, from his group affiliations, from his choices of words, from the publication in which the report is made--that *might* affect his reporting?

    3) Have the means of presenting data (charts and graphs, statistics used) affected the picture given?

    4) Does the report agree with other independent reports? (A variety of sources should be known about and consulted.)

d. The questions which one asks about observers and reporters of events must also be asked about people quoted in reports.

e. Perceptual sets, feeling predispositions, and biases will not only affect the validity of observing and reporting, but the way in which readers and listeners perceive and remember reports.

5. The verification of general claims is usually a more complex process than is the verification of simple claims.

    a. When the general claim involves a summation of specific claims about the entire group, the major questions are (a) whether each specific claim is valid or acceptable and (b) whether they have been totaled correctly.

    b. The verification of general factual claims based on inference is more complex than the verification of "summation" general factual claims.

        1) As with "summation" general claims, the validity of the specific or general claims from which the general claim is inferred must be examined.

        2) Because a general claim by inference is based on a sample from a group about which the generalization is made, questions must be asked about the sample.

        a) Was a sufficient number of cases included in the sample?

        b) Are there adequate assurances that the sample is typical, either through random or representative sampling?

    3) The assumptions underlying the inferences we draw (the conclusions we come to) should be examined in verifying specific and general factual claims.

    4) Some types of assumptions commonly lead to erroneous conclusions.

        a) Correlation does not mean cause and effect (i.e., one cannot assume that because two events are contiguous in time or space, one is the cause of the other).

        b) Assumptions about the relationship of group and individual characteristics are often the source of faulty generalizations.

            (1) It cannot be assumed that what is true of a group will be true of each individual in the group.

            (2) It cannot be assumed that what is true of the individuals making up the group is true of the group as an entity.

        c) The assumption that an occurrence has only one cause is usually not tenable when dealing with social issues.

        d) It is often erroneous to assume that past or present trends will continue into the future.

    5) The qualifications of authorities making general claims must be examined using the same questions as those used for observers and reports of specific claims, as well as by asking questions about sampling and assumptions.

6. Before drawing a conclusion about an individual person, thing, or event based on a general claim, one must check the validity of the general claim.

7. Sometimes the proof for a factual claim is offered by analogy, i.e., by reference to a similar situation in which the claim is true.

    a. The argument is that because the situations are similar in some respects, they will be in others.

    b. In dealing with analogies one should determine:

        1) In what way the situations are similar and different;

        2) If the differences are important;

        3) If the similarities are relevant to the point the analogy is supposed to prove.

8. Conclusions in regard to either specific or general claims should be thought of and stated in terms of the probability that they are correct.

C. Clarifying and choosing between value commitments is a major problem in political-ethical analysis.

1. Political-ethical decisions are usually justified in terms of the values they will support.

    a. Values are our standards or principles of worth--that is, our ideas as to what is good, worthwhile, desirable.

        1) Moral values present standards by which to judge behavior; esthetic values are standards for judging beauty.

        2) Esthetic values are not commonly used to justify public policy.

        3) Generally, when esthetics are relevant to a public policy decision--as in highway cleanliness campaigns--the decision involves considerations both of "beauty" *and* the moral values involved in imposing esthetic standards.

    b. Values vary in their generality--that is, in the breadth of the people and situations to which they apply.

    c. Values also vary in the extent to which they are considered basic to a conception of man.

    d. The most general values expressing the basic rights of men are central to public controversy because public policy is most often defended in terms of them.

    e. As values become less general (more specific) and less basic, they tend to be used less often to justify public policy.

    f. It is helpful to think of social values as continua rather than as absolutes.

2. Conflict of values takes place not only between individuals, but within the frames of reference of individuals.

    a. People may agree on the consequences, but not on the goodness of the consequences because different people emphasize different values depending on factors such as their background and their needs.

    b. Specific values may conflict with general values as they provide opposing standards by which to judge decisions.

- c. General values also often conflict in the sense that action based on one value is incompatible with action based on another value.
  - 1) Proposed policies can usually be defended *and* opposed in terms of important societal values.
  - 2) People are often aware only of the values that support their decisions, and often are unaware of the inconsistent application of values from one situation to the next.
    - a) It is important, therefore, to be able to name and verbalize important social and political values in the American culture.

3. There are rational ways of handling value conflict.
   - a. Factual issues are relevant to value conflict.
     - 1) Factual issues sometimes appear to be value conflicts (when there is agreement on the value to be enhanced but disagreement about the present state of affairs or the consequences of a proposed policy).
     - 2) Sometimes, genuine value conflict can be resolved when additional factual information is considered.
       - a) Additional information concerning the past or present state of affairs might cause a person to shift his value emphasis.
       - b) Considering the possible consequences of a proposed policy might cause a shift in value emphasis.
   - b. Language problems are relevant to value conflict.
     - 1) Appeals to values often use language with strong emotive loading.
     - 2) Apparent value agreement or conflict is sometimes based on vagueness in language, calling for careful definition of value terms.
   - c. A rational consideration of value conflict must often go beyond factual and language issues.
     - 1) A dispute over which value to support can sometimes be settled by determining if a policy in accord with one of the values will support a third, higher value. (Often a third higher value cannot be agreed upon or it provides little assistance because of its vagueness.)
     - 2) Sometimes a policy can be found that supports both values.

3) Considering contrasting situations in which the same opposed values are imbedded, but in which the individual would support a different value from one situation to the next, is sometimes helpful.

    a) This provides the basis for asking why the individual supports one value in one situation but a different value in another situation.

    b) This might make the individual aware of his inconsistency, with the result that he will decide to be consistent in supporting one value; or it might reveal acceptable reasons (e.g., significant differences in otherwise similar situations) for shifting support from one value to the other.

D. The decision made should be a qualified one which takes into account the likely or possible negative consequences of the policy supported.

CHAPTER NINE

SUGGESTIONS FOR TEACHING THE CONCEPTS

As noted earlier, the U.S.U. Social Studies Project grew out of a concern for the failure of social studies curricula to fulfill one of the most basic and commonly stated goals of social studies education: to teach students to think reflectively about the societal problems with which they, hopefully, will deal as adults in a democratic society. We have noted the inadequacies of the models of critical thinking available to the teacher and the lack of adequate materials and techniques for the teaching of critical thinking.

It seems fairly obvious that because of the heavy pupil-contact load of the typical public school teacher, he does not have the time to develop his own framework of concepts to serve as the basis for teaching students to analyze public issues (even if he felt competent to do so), nor does he have the time to develop the materials and methods for teaching such a set of concepts. For these reasons, the U.S.U. Project has concentrated on building two curricular products: (1) the Outline of Concepts for the Analysis of Public Issues and (2) suggestions and materials for teaching the concepts in the Outline. The Outline has been presented and the concepts in it have been discussed in some detail in previous chapters. We now turn to the second product.

Development

The Outline itself was developed through considerable discussion among project staff members, as well as through extensive reading. The materials and suggestions for teaching the concepts were even more a product of staff interaction. The U.S.U. Project was initiated in October of 1966. The major portion of the remainder of the 1966-67 academic year was spent in developing the Outline of Concepts. On several Saturdays, as many as eight members of the social studies team from the Roy High School, Weber County, Utah, joined the project staff in discussing the concepts to be put in the Outline and their organization, as well as ways of teaching the concepts.

By the summer of 1967, the Outline of Concepts was sufficiently developed to concentrate staff efforts on developing teaching suggestions, Seven members of the Roy social studies team* joined two research assistants, the project's assistant director, and the director in the development work.

Development of teaching suggestions did not proceed from commitment to any particular approach to teaching. That is, it was not assumed, for example, that "inquiry" teaching or some other approach would always be the most effective way to teach a concept. Teams were assigned different sections of the Outline. Each team made decisions as to what clusterings of concepts in its section of the Outline seemed to make the most sense for instructional purposes. The major criterion was the extent to which the same instructional situation appeared to be appropriate for teaching the concepts. In some cases, it seemed best to teach one concept at a time; at other times, several concepts seemed so closely related that it appeared they could be taught as part of a single "lesson". These groupings of concepts were discussed by the total staff and changes made where it seemed advisable. Brain storming sessions on ways of teaching the concepts were held, and following these each team worked on developing teaching suggestions for its concepts. Write-ups of the teaching suggestions were brought to the group for critiquing, followed by further revision before being typed in preliminary form for a tryout during the 1967-68 school year in the Roy High School.

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During this summer of curriculum development, work was also continued on the Outline of Concepts. Later portions of the Outline had not been completed by the beginning of the summer. Also, as experienced curriculum developers would anticipate, the concepts underwent reformulation and the Outline was reorganized as it was subjected to the scrutiny that is inevitable as one attempts to gain the understanding of concepts which is necessary to teach them.

By Fall, 1967, teaching suggestions had been developed for a sufficient number of concepts so that the first tryout could begin. It was November before pretesting for the research part of the project was completed, following the opening phase of the school year, and instruction with the project's materials began.

A team of four people, the project director and assistant director and two regular Roy High School teachers* took the responsibility for the eleventh grade social studies program of four sections of students. Three sections contained about sixty students each and the other contained about thirty students. The sections met two days a week, Tuesday and Thursday, for fifty-minute periods. As the Roy High School was specially constructed for team teaching, facilities were available for large group meetings of each section, as well as for discussions with groups as small as eight students. The entire school year, with the exception of the final two or three weeks, which were taken up by testing, was used to teach the project's materials. At that, teaching of the final concepts in the Outline was rushed.

During the summer of 1968, four of the Roy social studies team, including the two teachers who had taught the materials during the school year, worked with the project director and assistant director on revising the teaching suggestions. Further work was also done on the Outline of Concepts and teaching suggestions.which had not been developed for some concepts by the 1967-68 school year were prepared.

During the summer of 1968, a tryout was set up at the Sky View High School, Cache County, Utah, for the fall of 1968. The tryout at the Sky View High School began in September, 1968, and continued with some breaks until April, 1969.

Although the Sky View High School building was less than five years old, it had not been constructed for team teaching, and it provided the opportunity to try out the project's teaching suggestions in self-contained classrooms. Arrangements were made for two Sky View teachers* to use the project's materials in their twelfth grade problems of democracy classes. In addition, the assistant director and director taught one class (the assistant director actually did most of the teaching). One of the cooperating teachers also requested and was given permission to use the teaching suggestions in her world history and U.S. history classes.

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*Michael DeBloois and Lamont Lyons.

The second tryout provided an opportunity not scheduled in the original proposal to the U.S. Office of Education to obtain feedback on the materials and teaching suggestions. Of concern was the effectiveness of individual "lessons", as well as the overall teaching structure. Two apparently related difficulties had been noted during the Roy High School tryout. Although some of the concepts, such as those dealing with perception, seemed to have a built-in interest factor for the students (or, at least, the means we used to illustrate the concepts were catching), the exclusive study of the concepts seemed, despite our attempts to draw on interesting examples, to turn the students off at times. Also, the students appeared to have difficulty at times in grasping the relevance of specific concepts to thinking about public controversy.

The Roy tryout had been based on the assumption that *all* of the concepts could be "taught", using brief illustrations, before the students were involved in the intensive application of the concepts to public issues. Our experience indicated, however, that this approach involved too long a span of time without the discussion of public issues to maintain student interest. Consequently, in the Sky View tryout, we occasionally spent a three- to five-day period discussing cases which presented public issues. The timing of these discussion periods was based on two factors: our judgment that student interest was lagging, and the organization of the Outline. That is, we wanted to avoid, if possible, having the case discussions come in the middle of clusters of concepts. Fortunately, we found that the time necessary to teach the major sections of the Outline was about the right length for sustaining student interest. The breaks for discussion of cases provide opportunities to illustrate the relevance of the concepts, give the students practice in applying the concepts, and rejuvenate interest. Tests were also administered during these "breaks".

Perhaps the major lesson coming from this modification in procedures was the reminder that teaching any curriculum package must involve considerable input by the teacher in terms of decisions about pacing and the need to introduce additional materials and experiences. We had stuck rather slavishly to the teaching suggestions during the Roy tryout; during the Sky View tryout, we tended to view the suggestions more as a framework within which instruction took place, with considerable need for adaptation and innovation as the mood of the classroom dictated. The latter point of view seemed much more productive, which will not surprise many experienced teachers.

The Product

Before presenting the results of the project's curriculum development efforts, some comments about the teaching suggestions are in order. In the first place, as with the Outline of Concepts, the teaching suggestions are not considered to be final, finished, unalterable products. Curriculum development is a long process. Funding from the U.S. Office of Education, such as we have received, provides support that is essential if the process is to be initiated and followed through at all. Yet, even federal monies are limited, and a project can accomplish only so much within its funding. We have developed teaching suggestions that have gone through two or three revisions, but are still not polished products. The "spit and polish" will likely depend upon further financial support from a commercial publisher who sees value in the product we now have.

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*Mrs. Jackie White and Willard Jessop.

So, the teaching suggestions are not final in that they are not polished to the extent that might be desirable. However, there is another, more important, sense in which they are not finished. This project has operated on the assumption that there is no such thing as a "teacher proof" curricular package. The teacher is, and must be, a critical input to the educational process, and this input will often include the modification of curricular packages. Consequently, our teaching suggestions are meant to be *suggestions*. A teacher who is using the suggestions for the first time may well want to follow them very closely--especially if he does not feel completely secure with the Outline of Concepts and/or his own ability to devise means of teaching it. In most instances, we assume that following an initial teaching of the suggestions, the teacher will continue to use them as an instructional core. However, we hope that he will also be stimulated to come up with different ways of teaching concepts, using our work as a foundation. Adaptations may be particularly necessary to meet the interests and the ability levels of particular groups of students and to keep illustrative examples pertinent to the happenings of the day. But even more basically, there are undoubtedly many effective ways to teach any idea, and we anticipate that teachers will find them.

We have already noted the need for the teacher to make modifications in the overall structure of the suggestions--that is, to decide at what point tests, case discussions, and other diversions might be necessary to sustain or rejuvenate the students' interest and awareness of the relevance of the concepts to public issues. There is also another sense in which the teacher must make a major input if our materials are to have their full impact. Our collection of teaching suggestions is not meant to be a total curriculum. We have attempted to develop a product that would be a part of a total curricular sequence oriented to increasing the students' competence and inclination to deal intelligently with public issues. Our suggestions might be optimally used within the time limits of a semester's course. But, if the ideas are to become a part of each student's working frame of reference, continued opportunities for application, often with teacher guidance, must be provided. We do not think that, having gone through our teaching suggestions, the student will have acquired and be able to apply all of the ideas. Hopefully, the curriculum will provide for the extensive study and intensive analysis of public issues, so that the student can have the opportunity to relearn and practice using the concepts in the context of the consideration and discussion of complex social issues.

The Bundles

Just as work on the suggestions for teaching the concepts in the Outline did not proceed from a commitment to any one approach to teaching, there was initially no set conception of how to best organize the teaching suggestions. This was, however, a topic of discussion at several staff meetings. Also, during the critiques of teaching suggestions, questions were frequently raised in regard to the information we should be giving teachers if they were to be able to use our suggestions.

Gradually a format developed. In its final form, the format contains six parts. First, the concept or concepts to be taught are repeated directly from the Outline of Concepts. Second is a *Note to the Teacher*. This note serves several functions. One of the most important is to provide continuity for the teacher. Comments are made about how the concepts to be taught tie in with earlier concepts or lay the foundation for concepts to be taught later. The "notes" also contain other comments that might help the teacher. For example, one note points out that although the suggestions for teaching the concepts might appear long at first glance, this is due to the physical bulk of some readings that will not take up much class time.

Following the *Note to the Teacher* is an *Objectives* section. There was considerable discussion at the beginning of the project about the advisibility of translating all of the concepts in the Outline into carefully stated behavioral objectives before proceeding with the development of teaching suggestions. One or two members of the staff argued that this would be necessary if our curriculum development work was not to be unguided and diffused. There were several potent arguments to the contrary, however. One was that the development of precise behavioral objectives is a very time-consuming task. We might well end up spending so much time on stating and refining objectives that we would lack sufficient time for curriculum development. Furthermore, it was argued that the statement of objectives could not proceed independently of curriculum and test development. In other words, it is not a matter of stating objectives and then developing the means of teaching and testing them. Instead, there is a reciprocal relationship; attempts at curriculum and test development force a clarification and modification of objectives. Struggling to find ways to teach the concepts may make it evident that an objective needs to be modified because it is stated in an "unteachable" form or will undoubtedly be learned in a somewhat different, and legitimate, form. By the same token, as already noted, the attempt to develop the means of teaching a concept often will lead one to a better understanding of the concept, calling for a restatement of an objective.

It was decided to write behaviorally oriented objectives as part of the development of each set of teaching suggestions, but not to spend a great deal of time initially on formulating objectives. In fact, as the staff became more adept at their work, the statement of behavioral objectives became easier. The objectives for later bundles reflect this improvement in skill.

In retrospect, the decision to proceed with curriculum development without first demanding the most precise possible statement of behavioral objectives seems justified. It appears that we would have used up too much time in formulating objectives to have our materials ready for the Roy High School tryout. And, we found considerable need to modify concepts and statements of objectives as a result of our attempts to develop the means of teaching them.

Following the *Objectives* section are two mundane sounding, but important sections--*Materials Needed* and *Equipment Needed*. These are included so that the teacher can tell at a glance what is needed for the day's teaching. Our experience has been that these sections help to avoid the problem of finding oneself in the middle of a class period without a necessary handout or piece of audio-visual equipment.

Finally, comes the section headed *Teaching Suggestions*. The teaching suggestions are in reality a sequenced lesson plan. Suggestions are presented and numbered in the order that teaching would likely take place. While the suggestions vary in the amount of detail presented (there is more detail for concepts later in the Outline), generally they are complete enough statements so that the teacher can follow them as a lesson plan. In some places, the teacher is even provided suggested wordings that can be used verbatim with the class. The materials needed for carrying out the suggestions are included, as are suggested homework assignments.

A problem of ambiguity arose because we were calling the total group of sections, "teaching suggestions", as well as heading one section with that label. Such serious matters must receive due attention in a curriculum project. On several occasions, the staff discussed the appropriateness of different label changes. As the final section did contain specific teaching suggestions, the label seemed appropriately applied there, and a broader term was sought for the six sections as a whole. The term *lesson plan* was rejected because it implied something to be taught in a class period, and our suggestions were not built to that restriction. Some would take less than a class period; others would take more than one period. By the same token, *unit* was rejected because its common usage seemed to indicate something of longer duration. Teaching units are usually thought of as being at least a couple of weeks in length. At the same time, the word *package* seemed to imply something more tightly constructed and "tied up" than what we were developing. We also thought that that term had been overused in the educational field. Finally, someone suggested that we had a number of sections that seemed to go together in a bundle for the teacher, and the label, *teaching bundle,* was born.

Abbreviated versions of the teaching bundles follow. They are abbreviated for two reasons. The first is simply a matter of space. In order to make the final report to the U.S. Office of Education of manageable size, something had to be left out of the over 500 pages of bundles. To begin with, the concepts are not restated in the bundles in the report. This would have been an unnecessary redundancy with the Outline presented in its entirety earlier in the report. The materials Needed and Equipment Needed sections have been deleted, as this information can be obtained from the teaching suggestions. Also, a few sections of the teaching suggestions were shortened, and many of the actual transparencies and other visuals have not been included. The latter decision was made both to conserve space and because of the difficulty of duplication.

Another major reason for not including materials was the problem of copyrights. In several instances, we used readings and audio-visuals from copyrighted sources. As we had used these on a limited, experimental basis, it had not been necessary to obtain permissions. Obtaining permissions to include those materials in this final report would have consumed too much staff time. Also, it is doubtful that publishers would want to give permission to have their materials reproduced here. Copyrights cannot be protected in such a final report. In each instance where material has been deleted from a teaching bundle, we have attempted to fill the void, using, for example, verbal descriptions of slides or references to sources so that the enterprising teacher will be able to use the bundles.

TEACHING BUNDLES

BUNDLE 1: CONCEPTS I. A. B. & C.

Note on Purpose

Concept I, with its subconcepts, is not intended to be a detailed definition of "ethics." It is intended, rather to briefly introduce the student to the general nature of public issues. In the teaching suggestions, specific examples of ethical issues are presented, serious issues are contrasted to less serious issues, and private problems are contrasted to public issues.

The instructor should consciously avoid a detailed analysis of ethical decision-making*--that is what the rest of the Outline is about. The attempt would likely raise questions which can more easily be handled in due order. *The purpose of this section will be satisfied if the student gains general insight into the types of problems the Outline of Concepts will help him deal with;* it will be satisfied if he is able to consider the Outline of Concepts within the context of public issues, rather than as a series of facts to be memorized.

There are no teaching suggestions for Concept I, apart from those for the subconcepts.

Objectives

The student should be able to distinguish between ethical and nonethical, serious and less serious, and private and public issues. The student should also be able to suggest public issues which fit the general definition given in Concept I and its subconcepts.

Note on Procedure

If the student is not able to tell the difference between ethical and nonethical judgments, it might help to point out that ethical questions are often stated to include words such as "should," "ought," "right." However, one of the difficulties the teacher may face with this approach is the ambiguity of ethical terms. Words such as "proper," "good," "should," "right," "wrong," are frequently applied to nonethical as well as ethical judgments. For instance, when we say that a car battery is good, we do not mean that it deserves praise for righteousness. We mean rather that it has enough power to start the car. Likewise, when we say that Willie Mays is a good athlete, we are not usually referring to the fact that he is a morally good man--although he may be.

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*By "ethical decision-making" we mean, "Making decisions about matters in which a question of goodness, or rightness, or ought is raised." This expression should not be understood as indicating that the Outline of Concepts is intended to produce people guaranteed to make nice decisions. Similarly when a term such as "non-ethical judgments" is used it should not be interpreted as meaning "evil judgments." Rather, we mean, "judgments in which the question of ethics is not primarily at issue."

A separate section of the Outline of Concepts is devoted to language problems, including the type of ambiguity referred to above. If it can be avoided, it is probably best not to pursue that problem at this time. It is hoped that the teaching suggestions for Concept I. A. will enable the student to gain a preliminary insight into the nature of ethical questions, and that a detailed analysis can be reserved for later.

Teaching Suggestions

1. The study of the concepts in the Outline can be introduced with a slide-tape recording presentation of controversial issues designed to launch the students into a consideration of serious public issues.

2. The exercise, "The Stalled Car," is intended to pose a problem with which high school students can immediately identify in order to provide practice in distinguishing between *ethical* and *non-ethical* decisions.

The Stalled Car

Mack is driving home from a party at the Church-owned campgrounds. It's late at night and as he approaches the outskirts of a small town his car quits running. There is no garage or service station open this late and the lights are out in all of the houses nearby. He is now faced with several problems: some require ethical decisions, others do not.

Which of the following questions require ethical decisions--decisions about what is proper behavior--decisions about what kinds of behavior would be honest or dishonest, brave or cowardly, kind or cruel, good or evil, etc.? Remember, you are not being asked to make ethical decisions; you are being asked to identify questions which require ethical decisions.

Questions Facing Mack

A. Is the car out of gas?
B. Should I steal gas from one of these farmers and see if my car will start?
C. Would one of these farmers get out of bed and pull my car with the tractor?
D. Would it be right to ask one of these farmers to get up in the middle of the night and help me?
E. Should I steal one of these cars or trucks and drive to the city to get help?
F. Is there a pay-phone nearby, so that I can call for help?
G. If I start hitch-hiking would I be able to catch a ride this late at night?
H. Dad told me I shouldn't drive this old car up here alone. Should I tell him I had car trouble or should I sleep in the back seat and say that I stayed at Kent's house all night?

a. Read the story and the instructions.

b. Allow a few minutes for the students to mark their answers. The student can place a check by the ethical questions.

c. Discuss the students' answers. Some students will likely become confused by questions like, "Should I steal gas. . .?" and claim that it is not an ethical question because stealing gas is not a proper thing to do. In such cases, the students should be redirected to the instructions paragraph and encouraged to discuss the reasons for their choices, rather than simply told they are wrong. They may have good reasons for disagreeing.

3. Repeat the procedure using "Teacher Walkouts." This exercise moves the consideration of ethical issues to the public issues level.

Teacher Walkouts

Of the 33,000 teachers in the state, 24,000 refused to fulfill the commitment made in their contract. They walked out in protest to the "deplorable conditions" which they said existed in the public schools. They claimed they were striking a blow for thousands of students by demanding better conditions.

At first the Governor wouldn't talk with the association leaders. He felt that those who had left the classroom should be run out of the state. Then he began to change and considered urging school boards to rehire the adamant teachers.

Before the governor could decide what action should be taken, he had to consider many issues. Some of these are ethical questions, some are not. In your judgment which are which?

a. Can 24,000 replacements be found for the vacant positions?
b. Is it illegal for "public servants" to walk out or "resign?"
c. Is it right for teachers to attempt to disrupt the education of 500,000 students in protest of poor teaching conditions?
d. What is the average salary of teachers in the state and how does it compare with the average salaries of surrounding states?
e. If the teachers had not become militant, would the state have, of its own accord, upgraded its educational system?
f. Should the State Board of Education revoke the certificates of the "striking" teachers?
g. If a fact-finding Committee were set up, should striking teachers be allowed representation?

REMEMBER WE ARE TRYING TO IDENTIFY WHICH QUESTIONS ARE ETHICAL AND WHICH ARE NOT. ALTHOUGH THE QUESTIONS MAY BE IMPORTANT, FOR THE MOMENT AT LEAST, WE ARE NOT TRYING TO ANSWER THEM.

4. Show "Serious or Not Serious" on the overhead or hand out, including the instructions. After reading the questions, ask selected students to respond "serious" or "not serious" for each item.

Serious or Not Serious

Mark each of the following questions "serious" or "not serious." Since others may disagree with you, be ready to explain your reasons. It is not necessary for each person to agree, but your judgments should be reasonable in the sense that you are able to explain them to others. Remember, we are not trying to answer the questions; we are trying to decide whether the question is a serious problem or not.

QUESTIONS TO BE MARKED:

a. Should students polish their shoes before going to school or should they wait and do it at night?
b. If snipers shoot at policemen from an apartment building during a riot, should the police "shoot up" the whole building or should they hold their fire until they can see the snipers?
c. Should high school students be allowed to dress the way they want, or should the Board of Education tell them what they can wear?
d. Should the school cafeteria serve saurkraut every week?
e. Should high schools stop having football teams, and concentrate more on preparing students for college?
f. Should the President of the United States get an OK from Congress before sending our soldiers to war?

Discuss the students' responses, especially the reasons for them. Responses may vary considerably on this exercise. The emphasis should not be on conformity but on the differing reasons people give for judgments or seriousness.

5. Show "Ranking Issues According to Seriousness" on the overhead or hand out copies. In this case, finer distinctions are emphasized.

Ranking Issues According to Seriousness

The following issues were taken from one edition of a daily newspaper. You are to rank them in the order of their seriousness. Place the number of the most serious issue first, the one which you think is the next serious second, etc. Since one of the things that people argue about is whether one problem is more serious than another, be ready to state your reasons for ranking them as you do. Some issues you may not regard as serious enough to be called ethical problems. If you think that two issues are equally serious say so.

Issues to be Ranked:

a. Should Utah pass a law against prostitution?
b. Should people who want to cool off go for demonstration rides in air conditioned automobiles?

c. Should people be allowed to smoke marijuana?
d. Should looters be shot on sight during riots?
e. Should striking steel workers be allowed to take jobs as taxi drivers?
f. Should you open a savings account at First Universal Bank?
g. Should Andy Capp change his dirty underwear before throwing himself under a bus?

Once again, reasonableness rather than conformity should be stressed in discussing the students' responses.

Note on Procedure

Items 3, 4, and 5 should not be considered in any greater depth than suggested. Remember the purpose here is simply to introduce the student to the general nature of public issues and to help the student distinguish, in a general way, between ethical and non-ethical problems. In a sense, this attempt may be too successful; the student might think that non-ethical questions are not important to making decisions about ethical problems. Suggestion 6 is intended to counter that possibility, as well as provide a check on comprehension of previous exercises.

6. Read "Going to College" with the students.

Going to College

> Jerry Christiansen and his wife, Marilyn, were married the week following high school graduation. Jerry got a job driving a truck, they rented an apartment, and bought a car on credit. In the next four years, they had two children; Marilyn thought she might be pregnant with their third child.
>
> At first, Jerry was pleased with his work, but recently he noticed that several of his friends who were graduating from college were getting better jobs--more pay, steady work, clean working conditions. More important, they had opportunities for promotion.
>
> Jerry always liked math and science and believed that if he returned to school he could obtain a degree in engineering. However, going to college would not be easy for a married man with two--maybe three--children. He was faced now with making an ethical decision: Should he go back to college--knowing that it would be hard on the whole family, or should he stay where he is--knowing that his chances of getting ahead were small?
>
> *Questions Jerry must answer:*
>
> Jerry might be able to make a better decision about the general ethical question--should he go back to school?--if he first answers some non-ethical questions, such as:

a. How will he support his family while he goes to school?
b. Can his wife work to help out?
c. What will happen to the children if Mother and Father are gone all day?

Are there other non-ethical questions that Jerry might have to answer before he can make his final decision?

At the end of "Going to College", students are asked to suggest other non-ethical questions that Jerry may have to answer before he can make his final decision. Give the students a few minutes to make notes on this assignment, then discuss their suggestions.

Note on Procedure

The exercises used to illustrate Concept I.A. should have helped the student to understand the general nature of ethical questions: (1) that they differ from other types of questions, (2) that non-ethical questions may have to be answered before ethical issues can be settled, and (3) that not all questions are equally serious, some are not serious enough to be called ethical problems. Concept I. B. is intended to narrow the concern from all kinds of ethical questions--and the non-ethical questions needed to answer them--to public issues.

7. Ask the class to respond orally to the questions on the handout, titled, "Public or Private?"

Public or Private?

a. Suppose that you are the parent of a small child. The child refuses to eat her supper and you send her to bed without being fed. Is this properly a private decision or does the government have a right to tell you how to punish your child?
b. Suppose that you are the parent of a small child. Your child refuses to eat her supper and you beat her severely, breaking several bones. Is this a private decision or does the government have a right to tell you how to punish your child?
c. Suppose that you own a new car. You don't like to shift gears so you never use low gear. You decide to start the car out in second and drive everywhere without shifting. Thus, you wear your car out by straining the engine. Is this a private matter or does the government have a right to tell you how to drive your car?
d. You own a new car. You decide that a car is for getting places quickly, so you drive fast and get everywhere as quickly as possible. Is this a private matter or does the government have a right to tell you how fast you can drive?
e. You are against killing. You prefer not to go hunting. Is this a private matter or do others have a right to force you to go hunting?

f. You are against killing. You refuse to go to war. Does the government have a right to draft you into the army?

Disagreement among the students should not be discouraged, but they should be encouraged to explain their judgments.

Note on Procedure

Concept I. C. is a summary statement, rather than a new concept. No teaching materials are provided for it.

8. Homework Assignment:

Have the students find in newspapers and magazines at least five controversial issues (each one from a different source). They should identify which issues are private and which are public (both kinds should be included) and justify this classification. Also, have them list the issues according to their seriousness, and ask an ethical and a *non*-ethical question relevant to each issue.

9. *Summary and Overview*

The definition of public issues as ethical issues serves as the focus for the Outline of Concepts for the Analysis of Public Controversy and as a stepping stone into the study of specific concepts in the Outline. Experience in teaching the Outline indicates that initially students will have difficulty seeing "structure" to what they are being taught. In order to help them make sense of what is to follow, the students should be given a brief overview of what they will be studying for the next few weeks. A brief five or ten minute lecture can be used to point out that among the ideas to be studied in order to help the students make some intelligent decisions will be our need for orderliness (perceptual sets and handling inconsistency), the impact of frame of reference, the importance of language, and three types of disputes--word, factual, and value. An overlay might be prepared to present the main ideas in graphic form.

BUNDLE 2: CONCEPTS II. A. 1.

Note on Purpose

Teachers should help the students recognize that in everything they do they are ordering and selecting the different stimuli which are constantly bombarding them. Students should realize that many times this selection process is rational, but often the ordering and selection takes place on a lower cognitive level based on the individual's sets and predispositions. The teacher should attempt to involve each student in an activity where he may experience, first hand, this selection and ordering process.

Objectives

Students should be able to think of several common examples where so many stimuli are present that an orderly response to them all is impossible. They should recognize that an individual selects and responds to those stimuli which have meaning for him.

Teaching Suggestions

1. Show a transparency or slide of an accident on the street for 2 minutes. Replace that visual with one containing twenty questions about details in the scene. Uncovering one at a time, have the students answer them. After this exercise discuss the reasons why so few of them could answer all the questions. Why could they remember the ones they did? Was it because they had selected and ordered those stimuli which were most meaningful to them?

2. Play a three or four minutes stereo tape recording that has two programs superimposed or on separate channels so that the programs are heard simultaneously. (For example, a broadcast of a ball game and a reading of a love story.) After hearing the tape the students should be asked to answer questions taken from each program. Class discussion will show that students were not able to answer all the questions, that they selected and ordered the stimuli. Boys and girls are likely to show different attentiveness to the ball game and the love story.

BUNDLE 3: Concepts II. A. 2. & II. A. 2. a.

Note on Purpose

This concept is very closely related to the previous one, and occasionally the teacher should refer the student back to it. *The emphasis is to be on how our desires and needs, as well as our experiences, cause us to enter new situations with certain expectations.*

Objectives

Students should be able to identify several of their own perceptual sets, as well as the desires, needs, and experiences which may have caused these sets to develop.

The student should also be able to recognize why other individuals are predisposed to feel positively or negatively toward that which they perceive.

Teaching Suggestions

1. The teacher should give an introduction to the concept. The "note on purpose" offers a suggestion.

2. To give the students experience in how their perceptual sets and predispositions affect what they see, show them several pictures that can be interpreted differently. (Most general psychology texts have such pictures.)

3. The film *Eye of the Beholder* is an excellent treatment of perceptual sets and predispositions. Before they view the film, tell the students that they will be asked to list the perceptual sets of each individual in the film.

   After viewing the film, discuss with the class: (1) What were the sets each individual had? (2) How did the perceptual sets of each character in the film affect the way he behaved? (3) What past experiences, needs, or desires might have caused them to develop these perceptual sets and predispositions to feel positively or negatively toward what they saw?

   1. The artist
   2. The cabbie
   3. The waiter
   4. The mother
   5. The landlord
   6. The cleaning woman

4. At this point, it would be well for the teacher to discuss with the class how the consideration of perceptual sets is relevant to the analysis of public issues. Consider, for example, an American correspondent making a report of a Viet Cong attack on Saigon. It would be impossible for him to react to every stimuli. His perceptual sets would cause him to filter the stimuli and may cause him to order them to meet his expectations. These sets would also cause him to have predispositions, to have positive or negative feelings toward what he perceives. If a "hawk" Senator were visiting Saigon on a fact finding tour, what effect would his perceptual sets and feeling predispositions have on his perception of the attack? Consider the same question for a "dove" Senator. The teacher can use this Vietnam example or any other that would be current.

5. For a homework assignment give the students a list of eight nations and a list of about twelve to fifteen attributes (such as artistic, industrious, cruel, etc.). Have the students list under each nation the attributes which they feel best describe that nation. More than one attribute can be used for a nation, and the same attribute can be used several times.

Note to the Teacher

A discussion of the homework assignment during your next class meeting would prove to be a valuable review of this particular concept. Listing the various attributes assigned to particular nations by different students is an excellent way of illustrating differences in expectations.

BUNDLE 4: CONCEPTS II. A. 2. b. & c.

Note on Purpose

The teaching suggestions for these concepts lay the groundwork for much of what follows. The notion of individual differences in looking at the world is basic to understanding why people disagree over public issues and is thus a tie-in to the section on frame of reference to be taught soon. Being aware of the operation of perceptual sets also is basic to the later section on evaluating sources of evidence. Note that Concept II. A. 2. b. has two emphases to be illustrated by teaching suggestions #1 and #4: that we perceive and remember only parts of events and that different people perceive and recall differently. An important incidental outcome of the idea that reports become distorted during transmission should be a healthy skepticism about reports passed from one person to the next.

Objectives

The student should be able to recognize the factors which cause an "eye witness" to color that which he sees. He should be able to identify the role these factors might be playing in any reporting relevant to a public issue.

Teaching Suggestions

1. Have five students leave the room and then show the rest of the class an ambiguous picture such as the "Negro on a Bus".* Turn on the recorder. Ask one of the five students to come back in, tell him that he is going to be asked to describe a picture to another student, and then allow him to see the transparency for 30 seconds. Remove the transparency and ask a second student to come back in. Tell him to listen carefully as he will be asked to repeat the description of a scene in a picture. Have the first student tell the second everything he saw in the picture. Ask a third student to come back in, and have student #2 repeat everything #1 told him. Repeat this until the last student has heard what student #1 saw. The students observing the exercise will undoubtedly note the changes from one student to another. (You may even have to caution them not to giggle or point out changes to the participants.)

2. After the "retellings" are finished, play back the recording and note the changes which occurred. Discussion of *why* the changes occurred (i.e., personal prejudice) should be handled with caution. Emphasis should be on the apparent sets of the five demonstrators which caused changes to occur. (It would be well to note in passing that this exercise is often called a Rumor Clinic, because it illustrates so well how rumors grow.)

3. A Study on International Morality Part I. Pass out to the students a report of a U.N. debate between two countries, Ancos and Granda, in which the former accuses the later of colonial dominance. Discuss using questions like the following:

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*Available in the film strip *Rumor Clinic*, Anti-Defamation League of B'nai B'rith.

a. What is the relationship between Ancos and Granda?

b. Does Ancos have some grounds upon which to criticize Granda? If so, what are they?

c. Which country would you judge to be at fault?

4. Pass out A Study of International Morality Part II in which Cuba is inserted for Ancos and the United States for Granda. Read aloud with the class. Ask the same questions as in Suggestion 3, and compare the answers with those given the first time--the class should be able to account for the differences.

5. a. This next exercise must be staged, and will take up much of the class period. It is suggested that you plan to begin a class period with this part of the teaching suggestion.

An authority figure in the school, for example, the principal or assistant principal, must be consulted a day or two in advance. Careful attention should be given to explaining to the authority figure the concept dealing with perceptual sets. This might best be done by his reading the "Notes on Purpose." After he is aware of the purpose of the lesson, explain what part you would like him to play.

One student from each section will be secretly solicited to help with the presentation. He or she will be told that the administrator will storm angrily into the classroom accusing the student of some misdeed. The student is to respond, defiantly opposing the authority figure. There should be a harsh exchange of words, and the authority figure is to demand that the student come along to the office. "Keep your dirty hands off me," or "You're a liar," are appropriate responses, and the student should be forcibly ejected from the room.

Ask the authority figure to alter his appearance prior to entering the classroom. He might remove one shoe, loosen his tie, button his jacket askew, place an empty Coke bottle in his side pocket, or muss his hair. Strange objects can be carried, a shoehorn, a spur, a back-scratcher, a small American flag, etc. The purpose is to demonstrate to the class that when people are in a tense situation or feel threatened they will not see everything as well, remember little of, or even remember incorrectly, that which they observed.

b. To make this staging successful, several do's and don'ts are important.

DO pick students who could credibly be in some type of difficulty with the administration.
DON'T try to stage this unless you feel reasonably certain you have picked the right personalities to help.
DO encourage both the student and administrator to act angrily, use harsh tones and create a very tense threatening situation for the class to observe. Ask them to move quickly, getting in and out of the room in a hurry.
DON'T give the student too much prior notice. (Otherwise he may divulge the plan to his friends.)

DO work into this staging naturally. Perhaps you could be calling the roll when the confrontation occurs. Or you might begin with a review which would be interrupted. After the incident takes place, allow the class to react and buzz among themselves for a short time. Then interrupt with an amazed "What was that all about?", as though you were not involved in any way.
DON'T be too quick to give away the fact that it was staged! Students will be suspicious but it will take them a while to feel sure that it was not for real.

c. After the class is brought to order, ask some questions similar to the following:

1. What happened? (Keep asking until different versions are related.)
2. What was Mr. (authority figure) saying when he entered the room? (wait for different versions)
3. What did (student) say? (Wait again for all responses.)
4. How was Mr. __________ dressed? (Allow students to add to the list.)
5. How was (student) dressed? (Expand list.)
6. What was your personal reaction? (Get several--and ask for honesty.)

d. Have the student and authority figure re-enter the room to show the class where they were mistaken in their observations.

e. Ask questions and discuss why some of the responses were inaccurate. Then state the concepts taught in this bundle.

6. The following is an alternative to exercise number 5.

a. This exercise must be staged, and one of the students from each class must be solicited to help with the presentation. The student should sit near the front of the room, and as the class begins he should quietly put on some unusual piece of clothing, a tie, a cap, an arm band, or a brightly colored piece of cloth.

The following dialogue would be prearranged with the student:

Teacher: (Dryer than usual) "Today, class, we will continue the discussion on perceptual sets to determine their effect. . ."

Student: (Interrupting) "Ah chicken feed! Do we have to listen to that crap again today?"

Teacher: (Addressing student angrily) "That, Mr. __________, will land you in Mr. (assistant principal)'s office."

Student: (Loudly) "To hell with it! I'll quit school first!" (Stand up, face class, and shout) "__________, you're a lousy teacher and this is a finky school and I'm leaving!" (exit quickly)

b. After the student has left ask selected members of the class to respond to these questions:

1. What did the teacher say?
2. What did the student reply?

3. What did the student have on, what color were his clothes?
4. Was he wearing anything unusual?

c. Ask questions and discuss why some of the responses were inaccurate.

State the concepts taught in this bundle.

BUNDLE 5: CONCEPT II. A. 2. d.

Note on Purpose

Concepts II. A. 2. a.--II. A. 2. c. have helped to explain what perceptual sets are and how they are formed. This bundle cautions students about the operation of perceptual sets in everyday life. Often perceptual sets are helpful in making life more comfortable, but they can also distort our picture of the world and make it difficult for us to deal with public issues rationally.

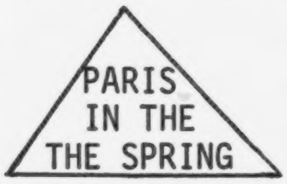
Objectives

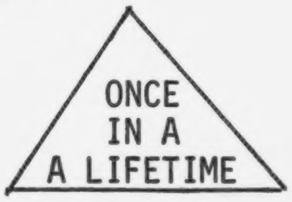
Students should be able to identify situations in which perceptual sets are helpful to the individual, as well as situations in which they might interfere with accurate perception of events.

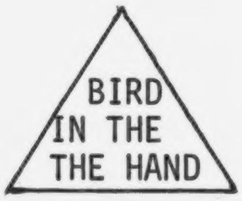
Teaching Suggestions

1. a. Make a tape recording of this activity for use in suggestion #2. The recording doesn't have to be done in secret, but it should be done inconspicuously.

   b. Project briefly a transparency of the three triangles and ask several students to read the three sentences. Repeat the exercise until they discover the error. Note that perceptual sets may lead us to overlook or misinterpret data.







2. Have the class note all the stimuli that have been hitting them as they sat in the classroom. Then play back what was recorded during suggestion #1 and have the students identify all the stimuli that were recorded. The fact that they were able to concentrate on the class activity dispute the distracting stimuli shows the positive role of sets in our lives.

3. In light of today's lesson, discuss the film *The Eye of the Beholder* a second time. Have the students write on a piece of paper a list of the

characters in the film and identify those sets which hindered or distorted perception.

4. Homework:

   a. Instruct the students to sit quietly for three minutes and record on paper every stimulus they receive.

   b. Have the students find two news stories in which perceptual sets might have been particularly significant. They should be able to identify the set and what effect it had on the outcome of the event or the reporting of the event.

BUNDLE 6: CONCEPTS II. B. 1. 2. & 3.

Note on Purpose

The purpose of these teaching suggestions is to make the student aware (1) of his reactions to contradictory data, (2) of the kind of situations in which he is likely to face inconsistency, (3) of the psychological means used to reduce the discomfort of inconsistency, and (4) of the possibility of rationally handling inconsistency. These ideas provide the basis for a consideration of frame of reference, which follows next, and of the basic problem of handling value conflicts, which is the last major part of the outline.

Objectives

The student should be able to indicate (either orally or in writing) when a situation makes him uncomfortable because of inconsistency and which elements in the situation are bothersome. He should also be able to identify various irrational ways which might be used to handle the inconsistency, (i.e., avoidance, reducing the importance, and compartmentalization). He should be able to propose how to handle the situation rationally. In oral discussions, he should be able to recognize and label reactions on the part of himself and others that seem the result of discomfort due to inconsistency, and to suggest rational solutions.

Teaching Suggestions

1. Tell the students that you are going to show them a report which was recently released, comparing the students from their school with those from a rival school. They are to read the report and, without comment, write down their reactions to it (i.e., what comes to mind as they read it). Put the report (uncomplimentary to their school) on the overhead and read it aloud. Give the students about 5 minutes to write down their reactions. (Though fictitious, the report should be treated as real by the teacher, so it will cause negative feelings in the students.)

2. Ask the students what their general reactions to the report are. Did it make them feel good and happy? Did it upset them? Why?

3. Following the same procedure, show the students a transparency favorable to Red China, such as an excerpt from Felix Greene, *China, the Country Americans are not Allowed to Know*, p. 384. Have the students write down their reactions, and then discuss the feelings created by the excerpt. (Teacher: This excerpt shows Red China in a favorable light not easily acceptable within the American frame of reference. The point in both discussions is to bring out the negative feelings caused by the negative information contained in the report.)

4. Point out to the students that their reactions to the two reports are "natural", that people generally feel uncomfortable when faced with information that doesn't agree with their beliefs and commitments.

5. There are two short humorous articles that could be used to illustrate the point that decisions involve positive and negative elements.

    a. "Nothing Serious Jr.," Dan Valentine, Jr., *Salt Lake Tribune*, June 16, 1967, humorously describes the plight of a teen-ager confused by a constant barrage of wise, but contradictory, maxims and proverbs offered as advice by adults.

    b. "But If, On the Other Hand," Dick West, United Press International, *Herald Journal* (Logan, Utah), June 22, 1967, p. 5. This article tells how Congressmen are perplexed by the positive and negative elements of a decision on an issue.

6. The teacher should note for the students that what is involved in the second article in #5 are competing notions of what is good, i.e., values. Sometimes the conflict is between what we believe generally to be good and what we believe should be done in a particular situation. For example, some people who believe in the brotherhood of man don't want negroes living next door. Also, the basic values of the society often conflict. In an argument over a law providing that restaurant owners could not refuse to serve anyone because of race or creed, one person might support the law by arguing that equal opportunity is good; another might oppose the law by arguing that property rights are to be valued and a man should be able to serve whom he wishes in his own restaurant. Handling such conflicts is important to making sound political-ethical decisions and we will return to this in greater detail.

7. To this point, it is hoped that the lesson has succeeded in accomplishing purposes 1 and 2 (along with the added impact of the homework assignment), so that instruction can shift to purposes three and four. After a transition statement to the effect of "Let's look back at our earlier comments on the materials we read", some students should be asked to read aloud the specific reactions they wrote down concerning the student comparison and the Red China reports.

8. Project a transparency listing the four methods of handling inconsistency suggested in the Outline. (Keep method number four--rationally weighing--covered.) Demonstrate how the different responses to the "school comparison"

and "Red China" materials fit under one of the three categories visible on the transparency.

9. Uncover the fourth method on the transparency. You have shown the class three methods of reducing discomfort due to inconsistency; at this point you should be sure to stress THAT RATIONAL METHODS ARE MORE DESIRABLE!!

10. Project a transparency that suggests the following rational methods of handling inconsistency: (1) Determine carefully what the positive and negative factors are in the decision to be made. (2) Weigh them carefully, taking into account (not ignoring) the negative factors. (3) Make a decision based on either accepting the inconsistency because of situational differences, or changing the belief, value, or action that is in conflict with your values so that consistency will be the result.

11. Explain that handling decisions rationally is better, partly because the decision is then more likely to be in touch with reality and to help one cope with the real world.

12. Homework: a. To help explain and summarize what has been taught in this bundle, have the students read "Degree of Consistency of the Self," in Aaron Quinn Sartain, Alvin John North, Jack Roy Strange, and Harold Martin Chapman, *Psychology: Understanding Human Behavior*, New York: McGraw-Hill Book Company, Inc., 1958, pp. 103-104.

    b. Have the students read "Today I Killed My Best Friend," *Time*, April 23, 1965, pp. 74-75, and answer questions concerning the conflicting elements involved in Dorothy Butts' decision and the evidence that she experienced severe discomfort because of her inconsistencies.

    c. Assign "Teen-Age Drivers. . .Should They Be Slowed," *Senior Scholastic*, March 6, 1959, pp. 6-7. Have the students describe their reactions to the article and suggest ways that a teen-ager might handle the information in the article by avoiding the uncomfortable information, by reducing its importance, by compartmentalizing, and by weighing the conflicting evidence and coming to a rational decision.

    d. Both the teacher and the students may want to read Leon Festinger, *A Theory of Cognitive Dissonance*, Evanston, Illinois: Row, Peterson and Company, 1957.

BUNDLE 7: CONCEPTS II. C. 1. to 4.

Note on Purpose

Frame of reference is a basic concept in the Outline, because one's frame provides the vantage point from which public issues are viewed and from which action is taken. The notion that individuals have different frames (the groundwork was laid for this concept in discussing how perceptual sets vary with experience) is important because it explains why people disagree over public policy.

The consideration of inconsistencies within our frames of reference is the foundation for considering value conflict and how it can be handled. Value conflict is treated in subsequent teaching bundles.

Objectives

Students should be able to identify elements in their frames of reference and also those of other people. Students should be able to offer explanations for their behavior, and the behavior of others, on the basis of the elements in their frames of reference.

Teaching Suggestions

1. Divide the class in half. Give half the class a handout taken from chapter ten of the Soviet Constitution, which deals with fundamental rights of citizens. Give the other half a handout of the same constitution articles but with all direct references to the Soviet Union deleted. Do not let the class know that two versions were handed out. Give the students time to read the handout, then ask, "Would the constitution be a good one to live under?" Have them respond by raising their hands if they like the constitution. There should be a fairly distinct difference in response on the two sides of the room. The teacher should then point out that all students read the same constitution, but that one version did not have references to the Soviet Union. Do not encourage discussion now; go on to the next suggestion. A discussion of student response to the constitution will come later.

2. Project a transparency which asks the reactions of different people (e.g., a high school student who has a history exam scheduled first period, the high school principal, business executive who needs to catch an early morning plane, a farmer, the owner of a ski resort) when they awaken to a surprise twelve inch snow fall. Discuss the different possible reactions. Then project the definition of frame of reference and point out how each person's frame of reference might have affected his reaction.

3. Project a transparency showing different boys reactions to an announcement of the first varsity basketball turnout (e.g., "I had better be there promptly", didn't even listen, "It'll be fun trying even if I can't make the team", "the coach already has his favorites picked out", etc.) Ask questions such as: "Why did the boys respond to the announcement the way they did?", and "In your estimation, what was it in their frames of reference that caused them to react that way?" (The boys' varied frames of reference, their *views of what the world is like, what is possible, and what is desirable* caused varied reactions to the notice.)

4. Now go back to the constitutions and discuss that exercise as it relates to frame of reference. The following are points that need to be brought out: Many beliefs and values that Americans hold are expressed in the Soviet Constitution. When the edited version was considered by the students, it seemed good to them in their frame of reference. The real version, when considered through the American frame of reference, was undesirable to the students. Reference to the U.S.S.R. brought to the

students' minds ideas about what is, what is possible, and what is desirable. For example, we don't think of Russia as a place where people have freedoms, or where one could obtain rights, nor do we think that we *should* react positively toward the U.S.S.R.

5. Homework: Henry Steele Commager, "A Historian Looks at Our Political Morality," *Saturday Review*, July 10, 1965, Vol. 48, pp. 16-18. Have the students read this article and work an exercise similar to the following:

    a. What effect does Commager think the American frame of reference has on the interpretation of history in American history books? Give some examples.

    b. Commager believes that the United States has a double standard of morality--that America tends to see its actions as good, but sees similar actions by another country as bad. (a) Give *five* examples that he cites.

       (b) Explain briefly what general effect this contradiction in the American frame of reference has had, or might have in the future, on American actions.

    c. If you disagree with Commager's views about the American frame of reference, point out where you disagree and *why*. (You may use the back to complete this answer, if necessary.)

    Discuss the article in class the next class meeting.

BUNDLE 8: CONCEPTS II. D. 1. 2. 3. a. b.

Note on Purpose

The concept of assumptions as beliefs taken for granted (as contrasted with the explicit statement of assumptions as the premises or starting points in a line of reasoning) is introduced here, but will be treated again in the discussion of verifying general claims. It is important that every opportunity be used to have the students practice identifying and examining assumptions (beliefs taken for granted by themselves or others).

Objectives

The objective of this lesson will be met if in class discussion the student can call to the attention of the class an assumption made by the teacher or classmates, or if given written material containing assumptions, he can identify them.

Teaching Suggestions

1. Review the frame of reference concepts by discussing the homework assignment on "A Historian Looks at Our Political Morality." If possible, break the students up into small groups so that more can participate. Keep in mind that the purpose is to examine frame of reference. (Approximately 10 minutes.)

2. Introduce this lesson by showing and discussing "Blond Worth a Second Glance," *Life*, June 16, 1967, p. 108.

   a. Show the view of the boy and the "blond" from the back. Ask the students what they see.

   b. Show the view of the boy and the dog from the front. Ask the students what they see now.

   c. Ask the class what assumptions caused them to conclude that the dog was a girl. The following are some likely responses:

      1. Only girls have long hair.
      2. An object, somewhat shorter than a boy, sitting next to him on a park bench, is a girl.
      3. Boys sit on park benches with their arms around girls, not dogs.

3. An excellent exercise on assumptions is found in Don Fabum, *Communications: The Transfer of Meaning*, pp. 36 and 38. There are eleven questions that refer to a scene of a family living room. The questions are answered from among the choices a. true, b. false, and c. ? (for can't tell). The scene is so familiar that the responses by most people to the questions will be based on commonly accepted assumptions.

   a. Give each student a copy of the eleven questions.

   b. Show the scene and have the students mark their responses to the questions.

   c. After the students have completed the questions go down the list quickly asking a different student to respond to each question.

   d. Go back and discuss why each response should be a question mark. *Point out that they had made many assumptions.*

   e. The teacher should then point out that it is necessary to make assumptions. Every assumption cannot be examined or discussion would break down, *but intelligent discussion of public issues requires that assumptions be recognized and examined.*

4. Ask the students to suggest some of the assumptions made by the characters in "Eye of the Beholder" (film previously shown). The point should be made that the characters in the film would have had a much more accurate view of each other and of the events they perceived if they would have recognized and examined their assumptions.

5. Hand out copies of "Across the Cultural Barrier", *The Key Reporter*, Autumn, 1965, p. 2. Read to the class the section describing the Frenchman's reaction to the flag at an American factory. Ask, "What assumption did the Frenchman make?" "What elements in the Frenchman's frame of reference caused him to make the assumption?"

6. Homework: Give each student a copy of a fictitious panel discussion about a school board dress standard policy. The panel is composed of students and prominent citizens of the community.

   The students are to suggest, in the space provided, possible underlying assumptions implicit in the statements by the panel members.

BUNDLE 9: CONCEPT III. A. & B.

Note on Purpose

Subconcepts A and B of Concept III are intended to demonstrate the importance of language to the students. The intent is to provide background and reasons for studying Subconcepts C, D, and E.

Subconcepts A and B are not used to analyze public issues; they are not tools which the student will be using in discussions of controversial topics. Therefore, it might be a mistake to stress their specific content. It is not necessary that the student master these subconcepts as long as he develops an appreciation for the importance of language.

Objectives

The student should be willing to pursue the more detailed analysis of language in Subconcepts C-E. He should also be able to state ways in which language is important to humans.

Teaching Suggestions

1. Use an audiovisual presentation that illustrates how language helps us to think and communicate. (Transparencies can be used showing people marking a map of a room instead of moving children to make the point of the usefulness of symbols.)

2. After the presentation, the teacher might ask students to give examples of how language helps us to think and to communicate. For instance, "How would you solve a problem in chemistry if you were not allowed to use either a word language or mathematical language?" "How could we find out what is going on in Vietnam if we had no language with which to communicate?" Students will probably be able to think of ways of getting by without language, but they should be able to see that it would be difficult to do so.

3. Homework: The importance of language in the process of thinking and communicating is illustrated in the life of Helen Keller. Have the students read, as a long range assignment, a book by Helen Keller or about her. *The Three Lives of Helen Keller*, by Richard Harrity and Ralph G. Martin, especially pages 26-47, is appropriate.

BUNDLE 10: CONCEPTS III. C. 1. & 2.

Note on Purpose

This set of concepts provides basic understandings for the treatment of disputes over word meaning which is a major section of the Outline (Concept IV. A.). Only if the student grasps the idea that word usage is a matter of convention will he be likely to see why the reasonable strategy for settling word disputes is to come to agreement on how to use the word, not to try to determine the word's "real" meaning.

Objectives

The student should be able to define what a symbol is and give examples of word and non-verbal symbols; he should be able to indicate various evidences of the lack of any natural word-referent relationships (e.g., changes in meaning, creation of new words, differing words for the same thing in different languages; he should refrain in discussions from making comments that indicate a lack of understanding of word-referent relationships (e.g., "The real meaning of words. . . .").

Teaching Suggestions

1. *Introductory Statement.* A transition from the previous section is needed. For example, the teacher might say: "We have been discussing the importance of language to our thinking and communication. Words are the basic unit of language. That is, our thoughts and statements are made up of words. Some controversies over public issues center around the language used, and this kind of controversy calls for particular kinds of behavior on your part if it is to be resolved adequately. We will soon be studying problems in communication that can occur because of language difficulties and how to handle these problems. But, in order to do that, we must first pay attention to the nature of the words that make up language.

2. Show the class a picture of a United States flag. Ask the students what it is. (an American flag) Ask what it stands for. (U.S.A., freedom, liberty, equality, etc.) Show a transparency or picture of a dove with an olive branch in its mouth. Ask what it is. Ask what it stands for. (peace)

3. Point out that the flag and the dove are examples of symbols. (Write the word "symbol" on the blackboard or on the overhead.) That is, they stand for or represent other things.

4. To be certain that the students understand what is meant by the word "symbol", ask them to indicate some symbols and what they stand for (such things as the symbol of your high school, etc.).

5. Point out to the students that the flag and dove are picture symbols, but that words are another type of symbol. That is, words also stand for or represent other things. Write the words "United States" on the board or overhead and point out that it stands for the country in much the same way as does the flag. Do the same with "peace" and the dove.

6. Use other examples to illustrate that words and other symbols are used to represent things.

7. Note for the students that words even represent "things" which don't exist, such as unicorns, "things" which are not concrete, such as "peace".

8. Hopefully by this point, the students will understand what is meant by the statement "words are symbols".

9. Point out to the students that symbols, including words, do not have a natural relationship to the "things" to which they refer, stand for, or represent. The relationship depends on people agreeing to use the symbol in a particular way or on our adopting common usage (that is, our learning that a given symbol commonly stands for certain things). For example, the symbol for the high school could be used to symbolize other things, or a new, entirely different symbol could be adopted for the high school.

10. Point out that the relationships between words and that for which they stand tend to seem natural. It would seem strange, for example, to call a chair by another name, or we often argue about the "real" meaning of a word such as "democracy" as if there were a meaning apart from what we agree it is or apart from common usage of the term. So, let us review some characteristics of words that will help us to remember that the meanings of words are not inherent or natural, but are what people agree upon, usually through the common way in which they use the word.

11. Point out that, for example, words can have more than one meaning. Have the students suggest some words with multiple meanings. (For example, dumb--can't speak, or not smart; club--large stick, night spot, organization, such as pep club, to beat; buck--male deer, dollar, to fight against.)

12. Also, point out that words and their meanings change. Show a transparency of a poem by Chaucer (1340-1400) with both the Middle English and a modern English "translation". The difference illustrates the broad changes in words and word meanings that take place over long periods of time.

13. Point out that language changes take place in the short run, too. New words are often invented. Project a list of slang words and their meanings as an illustration. Note that slang changes particularly rapidly, so that this list may already be out-of-date. (The teacher may want to ask the students for up-to-date slang and use their examples to point out how various relationships between word symbols and the things represented can be established.) Many new words have been invented or have come into use in space research, just as new names are invented for drugs. New

words even develop through usage in the discussion of public controversy. For example, two common words were put together to make the term "Black Power".

14. Point out that, in addition, meaning of individual words changes. "Range", for example, at one time referred to a hinged grating let down over a fire to set pots and pans on, then to a cooking apparatus containing an enclosed fireplace and side ovens (the old wood or oil burning kitchen stove), then to an electric stove with exposed elements or burners and an oven with a broiler. Other examples could be given or solicited from the class.

15. In addition, it should be noted, we should not assume that anything must necessarily be referred to by any one word because different languages use different words to refer to the same things. Project a list of Spanish words and their American equivalents. Note that, of course, this example could be multiplied by listing other foreign words. (Students taking foreign languages may wish to amplify the list.)

16. The teacher should close by pointing out that discussants may disagree over the meaning of words. If each forgets that words are only symbols and insists that he knows the real meaning, then there is little hope for coming to mutual agreement as to how to use the word.

17. Homework: Assign the following--(1) Find 5 words with multiple meanings. (2) Find 5 words whose meanings have changed. List the words and the changes in meaning. (3) Find 5 words that are new (within the last 10 years). List the words and their meanings.

BUNDLE 11: CONCEPTS III. C. 3. & 4.

Note on Purpose

Much of the discourse about public issues is couched in language which arouses our emotions. This set of concepts is aimed at introducing the student to an understanding of how language affects his reactions and his behavior. After studying the dual meaning conveyed by words, as with the concepts on frame of reference, the student should be able to understand better why people disagree with one another. This introduction to emotive meaning provides the basis for later discussion of the disruptive effects emotion can have on communication and thinking. This approach, along with an emphasis on examining assumptions, supplants the common lists of "propaganda devices" which students find difficult to remember and apply.

Objectives

The student, given examples of words, should be able to identify the descriptive and emotive meanings for him, as well as suggest varying descriptive and emotive meanings that the words might have for other people.

Teaching Suggestions

1. The teacher should make an introductory statement like the following: It is important to remember that there is no natural meaning for a word. But, if a person is to deal adequately with public controversy, he must also know about the different kinds of meaning conveyed by words and other symbols.

2. Next, instruct the students that you are going to read some words to them. They are to write down what the word means. Read the following list: (a) criminal, (b) home, (c) Communist, (d) brutal, (e) freedom.

3. Ask various students to read what they have written down. Their responses should be recorded on the blackboard or on an overhead transparency. Most students will probably write down descriptive definitions--e.g., criminal--a person who has broken the law; home--a place where a family resides; Communist--one who believes in the doctrine of Karl Marx; (students may be able to give only an emotive meaning of Communist); brutal--mean; freedom--opportunity to do what one wishes. (If differing descriptive definitions are given, point out to the students that words commonly do have different meanings for different people, that this is often a block to communication, and that we will be dealing with that in more detail soon.)

4. Point out to the students that they have given you the descriptive meanings of the words. (Write *descriptive meanings* on the blackboard or overhead.) That is, they have told you *what the word stands for, or represents to them, or what conditions must be met to be labeled with the word.*

5. Point out that words have another kind of meaning. They arouse feelings. "For example, when I say the word 'vomit', do you have a positive or a negative feeling? You know what it means to vomit (that is, the descriptive meaning), and in addition, the word creates *feelings*--probably negative ones. This feeling which the word arouses is its emotive meaning". (Write *emotive meaning*--how it makes you feel--on the blackboard or overhead next to *descriptive meaning.*)

6. Re-read the list of words used in (2) above, this time asking the students to write down words expressing their feelings, such as positive, negative, good, bad, happy, sad, fright, etc.

7. Ask students to tell you what they have written down. (If students react differently, mention that this is not unusual. That is, words quite often have different emotive meanings or loadings for different people. The problems created by this divergence will also be treated shortly.)

8. *Note to the teacher.* The lesson may not proceed in this neat sequence. If, for example, in responding to (3) above, the students give many indications of emotive meanings, write these down separately on the blackboard or overhead. Then point out to the students the two kinds of meanings being expressed, and label each kind of meaning, writing the labels on the blackboard or overhead. Then give some further examples, eliciting student responses, to illustrate the point.

9. Point out to the students that they will recall that words are symbols. Just as words convey both descriptive and emotive meaning, so do other symbols.

10. Show a picture or transparency of an American flag. Remind the students that they have already said that it stands for the United States of America. This is its descriptive meaning (one descriptive meaning, that is). Ask the students what feelings are aroused upon seeing the flag. Does the American flag always arouse the same feelings--e.g., among groups of foreigners (e.g., tearing down of the flag in Latin American riots)?

11. Show a picture or transparency of a dove. Remind the students that earlier it was said that the dove with olive branch represents peace. Ask what feelings are usually aroused by this symbol.

12. Re-emphasize that words and other symbols convey descriptive meaning and arouse emotions, and that these will be different for different people. Point out what should be obvious by now--that words can have both descriptive and emotive meanings at the same time, even though some words, such as "tree" will likely arouse little emotion or feeling for many people.

13. Note that agreement on the descriptive meaning of a word does not mean that there will be agreement on the emotive meaning. A word that we typically think of as "unemotive" may have emotive meaning (e.g., negative for someone who gets hay fever from locust trees; positive for someone who enjoys locust tree shade in his yard).

14. Note that this illustrates the different meanings conveyed by words or symbols. "Locust trees" might have the same descriptive and emotive meaning for two people; it might have different descriptive meaning (one person calls what we usually call a maple tree, a locust tree), but the same emotive meaning (both have good or negative feelings); or, as in the illustration (in #13) above, it might have the same descriptive meaning, but different emotive meaning.

15. Use the following description to further illustrate the differing descriptive and emotive meanings that words can convey: Consider the case of a Presidential election. On the night of the election word is received in the campaign headquarters of one of the candidates that the opposition candidate has left his hotel room and will shortly appear on national television to concede defeat. Most, if not all, of the people who worked on the campaign team of the winning candidate would likely agree on both the descriptive and emotive meaning of this announcement. They would probably interpret it as evidence that their candidate had won, and they would likely be overjoyed.

    Likewise, among themselves, the campaign workers for the opposition would likely agree on both the descriptive and emotive meaning of a concession of defeat by their candidate. They would likely agree that he had lost the election and they would be disappointed.

    Obviously, in the above illustration, the campaign workers for one of the two candidates agree with the workers for the other candidate on the descriptive meaning of the announcement--candidate X has been defeated--but they disagree on the emotive meaning since one set of workers is elated and the other dejected. It might even be possible for the campaign workers in one camp to disagree with the workers in the other camp as to the descriptive meaning as well as the emotive meaning. They might contend that conceding defeat does not mean that the candidate has no chance of victory. It would still be possible, if certain key states shifted ever so slightly, for their man to win. The other workers may claim that such a statement is nonsense. No one concedes defeat unless he is beaten.

16. Finally, note that words with similar descriptive meaning, but different emotive meaning, may be used to convey different impressions. Would you rather be called generous, or a spend-thrift; thrifty or a tightwad; persistent or stubborn or pigheaded; dedicated or a zealot?

17. Conclude by noting that we will be concerned throughout the rest of the course with the impact words can and do have on the decisions we make about public issues.

18. If the students are still having difficulty with the concepts, here are some more examples that could be used:

    A. Agreement on the emotive meaning, but disagreement on the descriptive meaning:

       The John Birch Society has a billboard along the highway which contains a slogan similar to "Truth is our only weapon. Education is our only strategy." It would seem not unlikely that a dispute could arise between a member of the John Birch Society and a non-member over the meaning of the word "education". For instance, they might agree on the emotive meaning of "education" (education is good), but disagree on the descriptive meaning. One of the two might claim that "to educate" means "to teach the truth". Since we know the truth about such things as "communism", or "patriotism", there is no need to present both sides of these issues.

    B. Agreement on the descriptive meaning, but disagreement on the emotive meaning:

       1. Many people would agree on the descriptive meaning of the term "Israeli soldiers", but the term would have a very different emotive meaning for an Arab than it would for an Israeli.

       2. Many people would agree on the descriptive meaning of the term "Martin Luther King, Jr." but the term would have different emotive meaning for a conservative southern white man who disliked Dr. King's work in civil rights, than it would have for some non-violent, but unhappy negro.

       3. Some young American men have gone to Canada so that they can't be drafted and sent to Vietnam. Some people call these men "draft dodgers". They call themselves "war objectors" or "conscientious objectors" or sometimes even "political exiles". All of these terms refer to the same men, and they all refer to the descriptive fact that they left the United States to avoid being sent to Vietnam, but these terms have different emotive meanings for different people.

19. Homework: Have the students read two articles that express emotional, but opposite, commitments to a stand on an issue. With *each* article have the students do the following: (a) Select ten words or phrases that have emotive meaning. Write down each word or phrase, next write the descriptive and the emotive meanings each word or phrase has for them. (b) For each article, write a short statement describing 1) the overall descriptive message the article seems intended to convey, and 2) the overall emotive feeling the article seems intended to build. (Two articles that might be used are "How to Stop the War in Vietnam", *The Herald Journal,* Logan, Utah, October 13, 1967, p. 10, and "The Social Boomerang of the Vietnamese 'Police Action'", *The Minority of One,* March, 1967, pp. 9-11.

BUNDLE 12: CONCEPT III. D. 1. a. 1.

Note on Purpose

In practice, it is difficult to distinguish between vagueness in general and that specific form of vagueness called "ambiguity". The main purpose of the following teaching suggestions is to help the student recognize when a word is not specific enough in a given context. Teaching the difference between ambiguity and general vagueness is seen only as a means to that end. If after instruction, the student cannot easily distinguish vagueness and ambiguity, the purpose will still be accomplished if he can determine that a word or phrase needs to be defined more explicitly.

Objectives

1) Given fairly clearcut examples of general vagueness and ambiguity, the better students should be able to distinguish one from the other. 2) Given examples of either general vagueness or ambiguity, most students should be able to determine that greater specificity is needed, even if they are unable to distinguish vagueness from ambiguity. 3) After instruction in these concepts, and the accompanying concepts concerning language difficulties, the frequency with which students request definitions in discussion should increase. 4) The frequency with which students voluntarily specify their meaning for others with whom they are communicating should also increase.

Teaching Suggestions

1. By the time this lesson is presented the student will have spent several days analyzing the nature of language and discussing its importance. The instructor should briefly review prior concepts before getting into the body of the lesson.

2. The teacher should introduce the concept that communication and thinking can break down if we fail to understand and agree upon the meaning of words being used.

a. Pass out a handout or project a transparency of "Waltzing Matilda" and ask someone in the class to explain what the song means. There will likely be a great deal of confusion.

b. Supply the students with an "interpretation" of "Waltzing Matilda" and go over it quickly. Note that we must agree upon the meaning of words or communication will break down.

c. "Remember that we have already discussed the fact that many words have more than one meaning" might be the transitory statement moving you into the next phase of the lesson.

3. After reminding the students that many words have more than one meaning and giving some examples, define "ambiguity". (*A word is ambiguous when:* (1) *it has more than one meaning, and* (2) *we are not certain which of the meanings is intended by the writer or speaker.*)

4. Show a transparency that gives the above definition, and also gives an example. The example is "Give Dad an expensive belt for Christmas." Ask the students what is meant by an expensive belt.

5. Point out that "Give Dad an expensive belt for Christmas" was a Chivas Regal (scotch whiskey) advertisement and discuss the obvious deliberate ambiguity of the word "belt".

6. Explain that there are many ambiguous terms which interfere with communication. Ask students to list a few orally. Write these on the overhead. After the students volunteer their words, discuss the list. Latitude should be given for a wide range of responses as long as the students can give at least two plausible definitions for each word which they claim is ambiguous.

   (Examples of ambiguous terms:

   DUMB = Stupid *or* unable to speak.
   FUNNY = Humorous, ho, ho, *or* odd, unusual.
   CLUB = Social organization *or* large stick, *or* to beat.
   LOUD = Very noisy *or* bright (loud tie).
   BUCK = A dollar, *or* a male deer, *or* to fight against.)

7. After discussing the students' lists, explain to the students that *ambiguity is a special kind of vagueness. A word is vague if the listener or reader can only partially tell what the speaker or writer means. A word is ambiguous if it has more than one plausible meaning in a given context.* Ambiguity = two or more meanings; vagueness = meaning unclear.

8. Refer to the Chivas Regal Ad again. Explain that some words do not have a precise meaning. Such words are vague. The word "expensive" in "expensive belt" does not have a precise meaning. Even if the ambiguity in the term "expensive belt" is settled--let's say that it refers to scotch whiskey--we do not know exactly how much whiskey must cost before it is expensive. Some people might consider whiskey expensive if it cost $5.00 a fifth. Others might not consider it expensive unless it costs $7.50 or more. The word "expensive" in this context is vague.

9. The following example may also be used in explaining vagueness.

   If a person's barber asks why he looks so tired, it may be enough to reply that he has just returned from a long trip. Certainly it would be enough to tell him that he drove over two thousand miles in three days. Though the answer is not very specific, it is specific enough to suit the need of the moment. However, if a company has salesmen traveling in company cars and wants to know what gas mileage the cars are getting, it is not enough to know that the car has been on a "long trip" or even that it traveled over two thousand miles. The exact number of miles driven is needed to compute gas mileage. A less than exact number is not specific enough. It is too vague.

10. Show a transparency such as "Equality of Opportunity".* Have the students volunteer those words or sentences which are *vague* to them, *but not ambiguous*. Have them also suggest those words or phrases which are ambiguous. Write these two lists of words on the blackboard or overhead under the headings *vague* or *ambiguous*.

11. If the students have a difficult time recognizing possible ambiguity or vagueness, ask them to explain what Mrs. Brownstone means by "equality of opportunity" and "favor some students over others". Point out that a person cannot really tell if she is for or against special efforts to integrate negro and white students.

12. If necessary, "vagueness" can also be illustrated by giving the student some simple instruction which he cannot carry out because it is too vague. For instance, the student may be told to go to the book case and bring the book to the teacher. As there are many books in most bookcases, the student's normal response will likely be "Which book?" This question is a response to the vagueness in the teacher's statement.

13. Return to Mrs. Brownstone's letter to Dr. Boggs and use it to point out that words can be ambiguous or vague in either their descriptive meaning or emotive meaning. This letter is ambiguous and/or vague in its descriptive meaning because we do not know what situation in the schools is being referred to. It is ambiguous and/or vague in its emotive meaning because we do not know how Mrs. Brownstone feels about the negroes and integration. From the letter a person can't tell whether she favors integration or whether she is against it.

14. For homework, have the students rewrite "Equality of Opportunity" (Mrs. Brownstone's letter) so as to remove the vagueness and ambiguity.

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*EQUALITY OF OPPORTUNITY

Suppose that you were the superintendent of schools in a large city district, and you received the following letter from one of the parents in the district.

Dear Dr. Boggs:

I am greatly disturbed by the way you are handling the education of negro students in our district. I firmly believe in equality of opportunity for all students. I cannot and will not support your attempts to favor some students over others just because they are of a different race. I am certain that there are many parents who feel the same way I do, and I advise you to take our wishes into account in the future.

Sincerely,
Mrs. Betty Brownstone

"Wall Street: The Bullish Funds", *Newsweek*, October, 1967, p. 83 can also be used for homework. Hand out mimeographed copies and have the students mark those sentences which they do not understand at all, those sentences which they only vaguely understand, and those sentences which they think they understand clearly. Students should go through the article once again, this time marking specific words which are difficult to understand.(Many times we can understand each word of a sentence, and still not understand what the whole sentence means. Likewise, we can often understand what the sentence means but not be able to define a word or two in the sentence.) These words need not be unfamiliar words; familiar words which are used in such a way that the student only vaguely understands what is meant should also be marked.

The following symbols can be used: DU = Don't Understand, V = Vague, and UC = Understand clearly, to mark this handout. They should make appropriate marks in space provided after each sentence.

BUNDLE 13: CONCEPTS III. D. 1. a. 2. and III. D. 2. e.*

Note on Purpose

Although the two concepts for which numbers are underlined above are in different parts of the Outline of Concepts, it is probably more convenient to teach them together. There is some question concerning the extent to which possible vagueness or ambiguity of figurative language interferes with communication. Whether figurative language is vague or ambiguous to a given individual is probably a function of both maturity and experience. It may be that high school students have reached a level of maturity so that figurative language does not present a serious problem in communication. On the other hand, it may be that the ability to handle figurative language does not come automatically with age or experience. Or, it may be that ability to handle figurative language comes automatically to a certain extent, but that training helps. It was on this later assumption that the following lesson plan was built. It is not the intention in these teaching suggestions to analyze figures of speech into their various types--simile, metaphor, symbol, etc. *Ability to recognize and deal with figures of speech in general is sufficient.*

Objectives

1. Given a statement which contains several figures of speech, the student should be able to recognize at least the more apparent ones.

2. For the same statement, the student should be able to offer a plausible explanation of what the author intended by the figure of speech.

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*The underlined concepts are the focus for the accompanying teaching suggestions. Note that they come from different parts of the Outline of Concepts.

3. The student should be able to explain the emotive effect different figures of speech have on him.

4. If the intended meaning of a figure of speech is vague or ambiguous to the student, he should be able to offer plausible alternative specific meanings.

Teaching Suggestions

1. Briefly review with the students that part of the Outline of Concepts which is related to this teaching bundle. The point of this brief review is to set the context for considering figurative language.

2. Give the students the definition of "figure of speech": A figure of speech is an expression which represents an idea in terms of a second idea which is somehow like the first one.

   Give some examples--such as calling a fierce fighting man a tiger.

3. Give the students mimeographied copies of excerpts from a book or article with many figures of speech. One good source is *Vietnam Hearings: Voices From the Grass Roots*, (a transcript of testimony given at the Hearing on the War in Vietnam, conducted by the Hon. Robert W. Enstenmeir, Member of Congress 2nd District, Wisconsin), Doubleday and Company, Inc. Garden City, New York, 1966, pp. 44 (no Copyright,) because it deals with a public issue. Read it aloud to them. Instruct the class that this handout contains several figures of speech which they are to locate and underline.

4. After giving the class a few minutes to mark the figures of speech in the handout, discuss their responses. During the discussion, select students to identify both the literal and figurative meaning of each figure of speech.

5. After you are satisfied that the class understands what is meant by "figure of speech" and that the class can identify figures of speech when they see them (more examples may have to be given), point out that *figures of speech frequently have strong emotive meaning*. To illustrate, use some examples, perhaps from the Vietnam Hearings. Ask the students such questions as, "How does each figure of speech make you feel?" "How does the emotive meaning of 'Uncle Ho' differ from the emotive meaning of 'Chicken Ho'?" The students have already been introduced to the notion of emotive meaning, so this exercise shouldn't take long.

6. Before leaving this topic, point out that there is nothing inherently wrong with figurative language. What a person says should not automatically be discounted just because it is expressed figuratively. But we should be on guard in two ways when we come into contact with figurative words:

   a. Figurative language can be ambiguous or vague.
      We can easily misunderstand what the other person means.
   b. Figurative language is frequently emotional. We should be aware of how we are reacting to the emotive appeal of figurative terms.

These ideas might be projected on a transparency as a teaching aid.

7. Homework Assignment: Have the student copy at least *five* figures of speech from no less than *five* different sources. Each student should copy the figure of speech, then write down the literal meaning (the meaning the words would "normally" impart) and the figurative meaning (the meaning which the author intended to suggest).

BUNDLE 14: CONCEPTS III. D. 1. b. c. and d.

Note on Purpose

The first concept, words may be used inconsistently, illustrates a special case of ambiguity, and is worthy of separate emphasis. The teaching suggestions for this concept focus on shifts in meaning occuring during a dialogue. This can be a serious problem in carrying on a rational discussion, but it is not intended that the student be taught that modifying definitions during discussions is improper. The problem is that shifts in meaning occur without being explicitly recognized. The problem arises not only in discussions, but also in speeches and articles. In the latter case, since the reader cannot question the speaker, shifts in meaning can be especially troublesome.

The second concept, unfamiliar words may cause difficulty, may be hard to teach because it is so apparent. Students may be so accustomed to reading or listening to unfamiliar or half-familiar words without reacting to them that they will not easily recognize that effective communication requires an effort on the reader's or listener's part. We cannot assume that the meaning of an unfamiliar word will be given by the context in which it is used.

The third concept, cultural differences may cause misunderstandings, is related to the "frame of reference" concept which has already been discussed.

Teaching Suggestions

1. Remind the students that we have been discussing the importance of communicating clearly, that ambiguity and/or vagueness is one barrier to clear communication, and that figurative language is one source of ambiguity or vagueness. A transitional statement like, "We are now going to consider other barriers to clear communication", will carry the discussion to the next topic.

2. Tell the class that communication becomes difficult when the meaning of words shifts during a speech or discussion. This is a special problem of ambiguity and makes it difficult for people to understand each other and/or come to agreement.

3. Pass out to the class the transcript of a discussion (made up) in which the participants allow the meaning of a word such as *aggression* to change. Read the dialogue with the students and have them note the places

where the definition shifts. Also have them list the different definitions. The purpose of using this illustration is not to convince the student that it is not useful to change one's mind about the meaning of a word, but that it is difficult to follow changes in meaning unless they are made explicit.

4. After the students have marked the sentences which contain changes in meaning and have made a list of the different meanings, discuss their lists. If they have a hard time detecting the shifts in meaning, the teacher may have to lend assistance.

5. Tell the students that shifts in meaning are not always as apparent as those in the example just given. Although they are hard to detect, we must make an attempt to explicate word meanings that seem to be shifting from one context to the next.

6. The lesson now shifts from "words may be used inconsistently" to "unfamiliar words may cause difficulty". Point out to the students that we have all had the experience of coming across words we are unfamiliar with. Usually we try to "fake it" by guessing what the word means from the way in which it is used. However, failure to find out more precisely what unfamiliar words mean can lead to failure in communication.

7. To illustrate that we don't always know the meanings of words that we read, give the students a practice, multiple choice, vocabulary test of words that are basic to the social sciences, such as hegemony, ethnocentrism, caucus, ghetto, etc. Referring back to the homework assignment, "Wall Street: The Bullish Funds", may help to make this point, too.

8. The lesson now shifts from "unfamiliar words may cause difficulty" to "cultural differences may cause people to misunderstand the descriptive and/or emotive meanings which words have for other people". Give the students mimeographed copies of "BYU Plays the Mother Role--Claims to Educate the 'whole man'", taken from the student newspaper at Utah State University, *Student Life,* October 4, 1967. Read it with the class. (Brigham Young University is a larger Utah institution and a rival of Utah State.)

9. Discuss the use of the term "mother role" as it is used in the above editorial. Points that should be brought out are: (1) the word "mother" is used figuratively, (2) it apparently has a negative emotive meaning for the person who wrote the editorial, and (3) it is apparently intended to refer to the claim that BYU shelters its students from reality.

10. Give the students a mimeographed copy of the letter-to-the-editor titled "Wants More Facts", *Student Life,* November 1, 1967, p. 4. The letter responds to "BYU Plays the Mother Role--Claims to Educate 'Whole Man'".

11. Point out to the students that the foreign student who wrote the above letter-to-the-editor misunderstood the figurative use of the word "mother". Although this student apparently speaks and writes English, he does not share the common cultural background or frame of reference needed in order to understand the figurative use of language as it appeared in the article about the Brigham Young University.

12. For homework, have the students read "Semantics and Culture",* and "Semantic Difficulties in International Communication".** The second article is much more difficult to read than the first. It will be meaningful to the better student, but may be of little value for the poor reader. (Note that in the second paragraph of the second article, Mr. Glenn states a concept that is very close to the idea of frame of reference as taught earlier. It might be a useful exercise to see if the students can identify which concept they have studied that is similar to Glenn's statement.)

13. A film is available which deals with the concepts taught in this bundle. It is designed to be used in a course on the teaching of foreign language, and discusses vocabulary differences in language usage; however, most of the film is relevant. You will want to preview the film to decide whether you need to show all of it.

    The film stresses that words do not have natural meanings, and that there are great cultural variations in language. The film can serve three purposes:

    a) It graphically illustrates several basic concepts in the language section;

    b) It illustrates concept II. C.--frame of reference; and

    c) The variety in presentation may be an interesting change of pace for the students.

    Principles and Methods of Teaching a Foreign Language, Film #4 "Words and Their Meanings". Modern Language Association of America, Inc. Teaching Film Custodians, Inc.

    Available at:
    University of Michigan
    Audio-visual Center
    Ann Arbor, Michigan

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*Gildersleeve, Virginia C., "Intellectual Allergies", *Saturday Review of Literature,* December 16, 1950, p. 6, in Kelley Thurman, (editor), *Semantics,* Boston: Houghton Mifflin, 1960, p. 86.

**Glen, Edmund S., "Semantic Difficulties in International Communication", in S. I. Hayakawa, (editor), *The Use and Misuse of Language,* Greenwich, Connecticut: Fawcett Publications, Inc., 1962, pp. 47-49.

BUNDLE 15: CONCEPTS III. D. 2. a. to d.

Note on Purpose

There is, of necessity, in the following teaching suggestions some repetition of previously learned concepts--such as the nature of emotively loaded symbols. However, this is one of the most useful concepts in analyzing public issues. Repetition is justified if students become aware of the power of emotion in communication and how it can be used in such a way that it inhibits rational procedures. Although there are no suggestions in the lesson plan to this effect, the teacher may also want to point out that emotive loading serves some of the needs of society. There are times for instance when a nation needs to rally its people in the face of an emergency. Emotive appeals are an effective way of doing this.

Objectives

The student's awareness of how emotively loaded symbols are used by others to influence him should be exhibited during small group discussions by his challenging or restating in unemotive language the emotively loaded statement of others.

The student should exhibit his awareness of his own use of emotively loaded symbols in small group discussions by refraining from using emotive appeals that might interfere with communication.

Teaching Suggestions

1. Remind the students that *descriptive meaning* refers to the information provided by a word, a group of words, or some other symbol, and that *emotive meaning* refers to the feelings aroused by a word, a group of words, or some other symbol. Remind them that we have already discussed one source of emotive loading--figurative language.

2. Tell the students that the emotive loading of words and other symbols may interfere with communication and thinking. It does this in basically two ways: (a) The loading may cause us to agree with the speaker or writer to a greater degree than we otherwise would; and (b) The loading may cause us to disagree with the speaker or writer to a greater degree than we otherwise would.

3. Tell the class that non-verbal symbols are often used to persuade people, and that these non-verbal symbols frequently contain emotive loading. For example, most newspapers carry political cartoons. If the person who draws the cartoons is against people who protest our involvement in Vietnam he may represent them as long-haired, bearded, dirty hippies. Or if he is against some of the Republican leaders in the country, he may present them dressed in old fashioned clothing to indicate that they are behind the times. The emotive loading of such cartoons may cause the person who reads the paper to adopt the same attitudes as that of the cartoonist without ever having examined the issues for themselves.

4. Show some political cartoons from current newspapers that will illustrate the above three points.

5. Point out to the class that political cartoons may either cause the reader to agree with the cartoonist or disagree with the cartoonist. For example, people who are not in favor of higher tariffs or even those who are not much concerned with the problem may look at a political cartoon representing Senator Dirksen in Revolutionary Era clothing and be influenced to believe that Senator Dirksen was out of step with the times. On the other hand, the followers of Senator Dirksen might find the cartoon offensive, and for that reason might be even less willing to listen to arguments against higher tariffs.

6. The crucifixion scene on the cover of *Ramparts*, January, 1967, can be used to re-emphasize that the *emotive loading of non-verbal symbols* can interfere with communication by causing us to disagree with the author or speaker more readily than we ordinarily would. The scene shows an old woman kneeling before a cross and two American soldiers, with bared bayonets, standing behind the crucified Christ.

   Begin this exercise by explaining to the class: (a) that they are going to be shown a cover picture from *Ramparts* magazine; (b) that *Ramparts* has been strongly opposed to the involvement of the United States in Vietnam; and (c) that the picture they are about to see was intended by the publishers of *Ramparts* to cause the reader to sympathize with the magazine's position on the Vietnam war; however (d) many people reacted negatively to the picture. That is, many people became angry with *Ramparts* for using such a scene on the cover of their magazine. Thus, rather than sympathize with the position taken by *Ramparts*, these people became hostile to the point that they found it difficult to even read what the magazine had to say about the war.

   After giving this explanation, show the class the crucifixion scene and ask them to explain why the picture might cause people to become angry. Their answers will probably reflect the notion that the scene is sacreligious. It appears to be a mockery of a sacred symbol.

7. Point out to the class that cartoons and photographs are not the only nonverbal symbols which can be used to persuade people to agree with positions they would not ordinarily support. Politicians always make certain that they are surrounded by symbols when they are giving a speech. Such symbols may be flags, or war veterans sitting on the speaker's platform, or the fact that the speech is given on a special day such as the Fourth of July or Washington's Birthday. Hitler's Nazi movement used this type of emotive symbol to a great extent. Give some more specific examples or ask the students if they can give some.

8. Tell the class that the examples we've considered to this point have been emotively loaded non-verbal symbols--political cartoons, photographs, flags, war heroes, Washington's Birthday. We are now going to consider how emotively loaded words can interfere with communication and thinking.

   Most of the examples of emotively loaded words which we will consider are related to the Cold War and the McCarthy era. In order to get the context, ask the class if they are familiar with the meaning of "Cold War' or if they know who McCarthy was. If the students think they are familiar with the terms, ask them to explain them. If they are not familiar with the terms, give them a brief explanation such as the following:

Although the United States and Russia were allies during World War II, the two countries had several diplomatic clashes following the war. The relationship between the two countries became strained to the point that the late 1940's and early 1950's became known as the "Cold War". During the late 1940's and early 1950's, Senator Joseph McCarthy became famous for his crusade against Communism in government and in the military. However, many people considered McCarthy a dangerous man. He was accused by some people of deliberately lying in Congress (Jack Anderson and Ronald W. May, *McCarthy: The Man, the Senator, and "Ism"*, pp. 131-133), of making accusations which he could not support (Charles E. Potter, *Days of Shame*, 1965, pp. 241-246), and of conduct unbecoming a Senator. He was finally censured by the United States Senate.

9. Explain to the class that Senator McCarthy frequently used propaganda techniques such as *name calling* in order to persuade people to believe things they would not believe if a less emotive approach were used.

   For example, in 1953 an Army dentist named Peress was discharged from military service. Peress was discharged for pleading the Fifth Amendment concerning whether he had ever belonged to organizations which the army considered to be subversive. It was never demonstrated that Major Peress was a Communist or that he had ever committed an act that would subject him to criminal charges. As far as the Army was concerned, Major Peress: (1) had performed his duties adequately as a military dentist, (2) had performed no actions which could cause his superior officers to doubt his loyalty--except plead the Fifth Amendment concerning membership in organizations which were under suspicion--and (3) had not been in a position where he could have obtained secret information even if he had wanted to do so.

   A transparency titled "Mc-Carthy-Peress" could be made up from pages 70-105 of Potter's *Days of Shame* as an example of name calling. The transparency would include such emotively loaded words as "Fifth Amendment Communist", "treason", "traitors". Point out to the students that each time McCarthy made one of these name calling charges the newspapers reported what he said. The result was that many people believed that Peress was a Communist and that the Army was full of traitors, *even though these accusations were never substantiated.*

10. Remind the class that the use of emotively loaded words illustrated in the McCarthy-Peress case illustrates a propaganda technique called "name calling". Senator McCarthy also used a second technique known as "glittering generalities". Glittering generalities consists of connecting a word with positive emotive loadings, such as "American way", with an idea, person, or organization. When McCarthy first ran for the Senate seat held by Robert LaFollette, Jr. he used glittering generalities such as "industrial-labor peace", "the war effort", "the sinews of war", "15,000,000 Americans were fighting". McCarthy implied that LaFollette did nothing during the war except "draw fat rations", an example of name calling.

11. Point out to the class that name calling and glittering generalities don't always work. They can cause the listener or reader to disagree with the speaker or writer more readily than they ordinarily would.

    Jack Anderson and Ronald W. May, in their book, *McCarthy: The Man, the Senator, the "Ism"*, tell of an instance in which an emotively loaded term caused an audience to disagree with the position taken by the late Senator Joseph McCarthy. President Eisenhower nominated Philip Caryl Jessup to be Ambassador to the United Nations. McCarthy accused Jessup of "preaching the Communist Party line and, in opposing Jessup's appointment when it came to the Senate for confirmation (Anderson and May, p. 227), he said, "I'm dealing with too many of these slimy creatures. . ." Ask the class what the emotive loading of "slimy creatures" is. Point out that the other Senators reacted negatively, and this decreased their willingness to listen to what McCarthy had to say.

12. Tell the students that propaganda techniques such as name calling and glittering generalities sometimes use the name of a person or organization with heavy emotive loading. For example, the name "Communist Party of the United States" has strong negative emotive loading for most people in this country. The Communists may be interested in promoting projects that non-Communists are also interested in, but if the word "Communist" is associated with the project other people will have nothing to do with it. For that reason, during the 1940's and the 1950's, the Communist Party of the United States set up a number of front organizations which had more appealing names, such as the American Committee for Spanish Freedom, the Civil Rights Congress, and the Joint Anti-Fascist Refugee Committee.

13. Tell the class that the actor, Jose Ferrer, was one of the persons who became involved with several Communist supported organizations. Use the following summary to set the context for Mr. Ferrer's explanation of how the emotive loading of names caused him to become involved with these Communist sponsored programs.

    During March and April, 1951, the House Un-American Activities Committee investigated alledged Communist infiltration of the motion-picture industry. This investigation occurred during the height of the cold war; a time when relations between the United States and Russia were strained and there was a good deal of anti-Communist feeling in this country. Jose Ferrer had been accused in the press of being associated with several Communist organizations. He appeared before the House Un-American Activities Committee and defended himself on the grounds that he was not a Communist, had never been one, and was not sympathetic to their cause. He further claimed that he was unaware of the relationship between some of the groups to which he had been associated and the Communist Party, and that if he had known the relationship he would have had nothing to do with them.

14. Mr. Ferrer claimed that the positive emotive loading of the names associated with the groups--A. F. of L., C. I. O.,Mrs. Roosevelt, etc.--caused him to "drop his guard" and agree to something he would not have agreed to had he believed it was sponsored by the Communist Party.

15. In the case of the Joint Anti-Fascist Refugee Committee, Mr. Ferrer said that the negative emotive loading of Frank Fay's name was such that he found it difficult to listen to charges Fay made about the organization being a Communist front.

16. Summarize for the class the concepts covered in the above teaching suggestions. (See the statement of concepts at the beginning of this bundle.)

17. Homework assignment:

    (a) Have the students clip from newspapers non-verbal symbols which carry emotive meaning. (Political cartoons, comic strips, etc.) These are often used to persuade people to believe something they would not believe as readily if the emotive loading were not present. Credit might be awarded for clippings which are turned in, and perhaps a display could be made on a tackboard of the cartoons and comic strips which are turned in which appropriately demonstrate the concept.

    (b) Have the students clip from newspapers, editorials, or letters to the editor examples of name calling or glittering generalities (the teacher might find it necessary to inform the class where the letters to the editor and editorials are found in the local paper).

    (c) Ask the students to analyze an article such as "Algeria on Dead Center", *Newsweek,* November 13, 1967, pp. 52-57, picking out emotively loaded words, revising sentences to remove loading, and summarizing the feelings the author intended to evoke.

BUNDLE 16: CONCEPTS III. D. 3. a. b. & c.

Note on Purpose

One of the general purposes of Section III of the Outline of Concepts is to help the student become aware of how his thinking is influenced by language. For instance, Concept II. D. 2. stresses the impact of emotively loaded words and how they influence our opinions. The present section reiterates some of the previous discussion of emotive loading and adds to it the notion that we sometimes uncritically react to words without examining the people or things that the words refer to. We often assume that labels and stereotypes tell us more about people or things than they do.

Objectives

Given the class name of a group of people--Asians, for instance--and asked to explain what these people are like, the student should be unwilling to say anything that would apply to every member of the group.

During discussion, the student should ask for greater specificity if class names or stereotypes are used in such a way as to obscure claims which are important to the discussion. For instance, if it is claimed that a person is a socialist, it might be important to determine what sort of socialism that person believes in.

If claims are made concerning the beliefs or actions of individuals or groups of individuals, the student should ask whether the claim takes into account the diversity within groups and the fact that people change over time.

Note on Procedure

In order to introduce Concepts III. D. 3. a. and b.--stereotypes and emotively loaded class names--the following teaching suggestions focus on the nature, usefulness, and limitations of general words compared to more specific words. The teacher may notice that in doing so we are in part returning to a theme that was previously introduced under Concept III. C. 1. a.--vagueness.

Teaching Suggestions

1. Remind students that *some words are more general or more specific than others*. "Senator" is more general than "California State Senator" and more specific than "politician". "Democrat" is more general than "President of the Utah Young Democrats". "Farmer" is more general than "Fruit Grower". "Conservative Republican" is more general than "member of the John Birch Society".

2. Use an explanation such as the following to illustrate that *general words can be useful*. Suppose that you were asked to introduce two speakers at a political debate. You do not have time to tell everything about each speaker. After all, the audience wants to hear what the speakers have to say. So, it is more convenient to tell only a few general things about each speaker. For instance, "Tom Crawford is a Republican, married, the father of two children, an active member in his church, and a partner in a local law firm". Consider how long it would take to introduce Tom Crawford if you did not limit yourself to a few general statements. For instance, if we tried to be very specific about the statement "Tom Crawford is a Republican", we might say something like this:

   "Tom Crawford was raised in a Republican home. Both of his parents were lifelong Republicans who were active in local politics and taught their children to be loyal to the party. Tom spent many hours as a boy carrying handbills from door to door trying to win votes for Republican candidates. In high school he formed a political debate club in which he consistently championed the Republican cause. In college, he joined the Young Republicans and was elected president of the local chapter during his junior year. . ."

   Point out to the students how long it would take to introduce just one speaker if we tried to be as specific about everything about the person as we were in the above illustration to tell just what kind of Republican Tom Crawford was.

(The above illustration of the usefulness of general terms could be handled in several ways. The teacher could use some such monologue as the above to explain the point. Or he might ask some student to introduce an imaginary speaker. If the student was brief and spoke in general terms the teacher might note some of these and ask the student to be more specific. If the student was long winded, the teacher might point out that the introduction was so long that there was no time left for the speaker. In any case, the point is that specificity is not always a virtue. The brevity of general terms can at times be useful.)

3. Illustrate with the following that whether general words are sufficient depends on the situation. Suppose that you were introducing Tom Crawford to a third person that you bumped into on the street. It would probably be enough to say something like, "I would like you to meet Tom Crawford. He's one of your local Republicans". On the other hand, if you were writing a book about Tom Crawford, you might want to spend a whole chapter explaining Tom's work in the Republican Party.

4. Explain to the class that although general words are useful in many situations, we sometimes forget that they tell us very little about the person or thing we are talking about. For example, ask the class to suppose that someone introduced them to a gentleman and said that he was a Catholic priest. How much would they know about that priest if they were fairly well acquainted with the Catholic church? What would the class not know about the gentleman if they knew only that he was a priest? (It would be helpful to make up ahead of time a list of possible "knowns" and "unknowns" to use in the discussion.)

5. Explain to the class that we sometimes use the word "stereotype" to refer to oversimplified ideas aroused by general words or labels. The term "stereotype" is applicable where people assume that a general word or label tells them more about a person or organization than it really does. "Catholic priest" in teaching suggestion 4 often arouses a stereotype. When people use stereotypes, they are reacting to the word without examining the person or thing the word stands for.

6. Ask the students to suggest other examples of people reacting to stereotypes or general labels without examining the person or thing the label stands for. If the students cannot readily offer suggestions, the following examples might be used to stimulate discussion.

   a. A gentleman is invited by a friend to play golf at a private country club. He accepts and they agree to meet in the pro-shop. During a brief conversation with the pro, the guest mentions that the last time he went golfing it was with his Rabbi. The pro asks him if he is Jewish, and upon being told "yes", he informs the guest that Jews are not permitted in the club or to play the course. The people who made this rule were reacting to labels rather than to individuals. The assumptions are: 1) Jews do not make good members of country clubs, 2) that all Jews are alike, or 3) that prospective members will not join a club that has Jewish members. It is quite possible that some Jews don't make good club members, just as many other people do not. But to assume that all people who fit under one label are exactly alike is quite certainly wrong.

b. A negro family tries to buy a home in an all-white neighborhood. None of the families in the neighborhood have met the negro family, but some of the white families are against them moving in and others are in favor of it. Families on both sides of the issue might base their positions on a stereotype. For some the stereotype of a negro may be people who do not take care of their homes or yards. Either group--those who oppose the negro family or those who support them--could be wrong. The negro family may prove to be exceptional people who are able to win support from even those who originally opposed them, or they may be the sort of people that nobody would want to live by. Neither their supporters nor their opponents can know this in advance. But reacting to the stereotype "negro family" will be of little help in determining what the negro family will be like. Of course, the stereotype will likely affect how some people treat negroes (frame of reference affects behavior).

7. Point out to the class that we are likely to react to stereotypes when emotively loaded class names are used in discussing public issues. The process of applying emotively loaded group names to people works two ways. Not only do we tend to give people emotively loaded class names to indicate that we approve or disapprove what they are doing, but we also tend to approve or disapprove of someone according to the class name that someone else has given him. (*Note*--the above point need not be given a great deal of attention since it has already been dealt with under III. D. 2. a. and b.)

8. Tell the students that just as words change over a period of time, so do people and things even when their names do not. (This is Concept III. D. 3. c.)

9. To illustrate that people and things change even though their names do not, ask the students if they can think of any politicians who have changed their stand on some public issues.

   a. Lyndon Johnson was supposedly much more conservative on some domestic issues when he was a Senator from Texas than he was as President of the United States. *Newsweek* 53: 29, March 30, 1959; *New Republic* 14:6, Nov. 2, 1959; *U.S. News and World Report* 49: 96-9, July 11, 1960.

   b. Robert F. Kennedy was once associated with Senator Joseph McCarthy; after becoming Attorney General and then Senator from New York, he developed a much more liberal image. *U.S. News and World Report* 38: 16, January 28, 1955; *Look* 19:89, January 24, 1955; for McCarthy see *Reader's Guide,* Vol. 19.

10. This concept can also be illustrated by asking the students to suggest ways in which some nations have changed.

   a. For many years after the Russian Revolution, the USSR was thought by many people to be a radical, unstable, dangerous country. Some of these people now claim that the USSR has become more stable, less radical and less dangerous than other countries, such as China.

b. Both Germany and Japan have gone through drastic changes in their form of government since 1945. They have gone from authoritarian or totalitarian forms of government to representative democracies, and from our bitter enemies to our close allies.

c. The United States has gone from a second or third rate world power to become one of the world's two "super-power" in the past fifty years, as has Russia. In the same period of time, Great Britain has lost her position of world predominance.

11. Students may also suggest ways in which religions have changed or are changing.

    a. The Catholic church has made changes in the liturgy, and is carrying on continuous debate on other issues.

    b. The "Mormon" church was at one time in the vanguard of radical opinions on such issues as polygamy and communal living. Today it tends to be a conservative middle-of-the-road church.

12. Point out to the students that even the "ordinary man" goes through many changes. We switch parties in politics, some of us becoming more conservative, some others becoming more liberal. We change our outlooks on religion. Some of us switch churches, others become more active or less active. No one is exactly the same today as he was ten years ago.

13. The examples listed above are intended to culminate in the following point. *Despite all the ways that people and things change, names usually remain the same. Often we react to the name, rather than the person or thing behind the name. A person who thinks that Russia is the same today as it was 20 years ago may make some serious mistakes. So may the person who still thinks of Germany as fascist, or who thinks of Lyndon Johnson as a southern conservative*; or that our economic system is the same as 150 years ago.*

14. Summarize the concepts dealt with in this lesson:

    III. D. 3.--Communication and thinking can be impaired if people react to words or other symbols, rather than to the things the symbols stand for.

    III. D. 3. a.--We sometimes react to stereotypes, forgetting, for example, that people categorized with the same label are different in many respects.

    III. D. 3. b.--We are especially likely to react in this way to emotively loaded class names used in discussing public issues.

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*Students should be warned against the opposite mistake of believing that since time has passed, people and things have changed significantly. It may be that a man who is a staunch Democrat at age 20 will still be one at age 60 or that a person who was against government welfare programs at age 30 will still be against them at age 50.

III. D. 3. c.--We sometimes forget that people and things change even though their names do not.

15. Have the students read, as a homework assignment, the article "What we Think of Other People". O. Klineberg, "Pictures in Our Heads", *UNESCO Courier*, VIII (Sept. 1955), pp. 5-8. In L. S. Starrianos, *Readings in World History*, (Boston, 1965), pp. 29-34.

16. A homework assignment on "Who Would You Vote For?" could be assigned. For two candidates, give their age, the party they belong to, their marital status, their occupations, one area of activity in the community, and their name. Ask the students to choose one man to vote for and give reasons. (The lists of characteristics should be different--e.g., a Republican and a Democrat.)

    Discuss the assignment in terms of the following: In effect, we have six labels we can apply to each man, but we know very little about the man and virtually nothing about their attitudes and qualifications for city councilman.

    A Democrat may be more liberal than a Republican--or he may not.

    A married man may be a better councilman than a single man--or he may not. Grover Cleveland wasn't married, neither was Dag Hammershold. Adlai Stevenson was divorced. A single man may have more time to devote to city business--or he may have less interest in the problems of families in the city.

    An older man might be more mature than a young man--or he may not.

    A sunday school teacher may or may not make a better council man than a Mason would.

BUNDLE 17: CONCEPTS IV. A. 1. a. b. c.

Note on Purpose

The concepts to be taught by this bundle are more procedural than analytic in nature. That is, they focus on the process of carrying on a discussion, rather than on the analysis of the issues under discussion. However, if procedures for settling language and word disputes are to be used, points of disagreement or lack of understanding must be identified. The basic aim of this bundle is to provide students with a process by which breakdowns in communication can be identified so that the definitional process can be initiated.

Objectives

In discussions, the student should repeat what others have said and ask if he has heard correctly, or ask the other person to repeat himself; he should also be able to recognize and challenge in discussions or point out in written dialogues attempts by people to use restatement to covertly shift another person's position.

Teaching Suggestions

1. Begin by asking the students if they have noticed the number of discussions in which people seem not to be talking to or understanding one another. As individuals, we tend to notice when other people don't answer our questions or when they make irrelevant responses. However, we often are not aware that what we say ourselves does not really pertain to what the other person said. Often this happens because we don't understand what the other person intended to say, and don't go to the trouble to find out.

2. "To illustrate the point, let's look at a discussion that might be representative of many everyday discussions." A good illustration is found in Don Fabun, *Communications: The Transfer of Meaning* (The Glencoe Press), p. 33. The discussion involves misunderstandings arising out of the statement "I have a pet at home".

3. Explain to the class that it is often possible for a general statement in itself to make sense (that is, it is understandable), yet lack adequate specificity for the conversation. Often it might be sufficient just to know that the other person has a pet; you may not need to know more.

4. Also point out that the problem in discussion may be not that a statement is too general, but that the words themselves are vague, ambiguous, or new. ("Pet" is a vague word.) This is especially likely to be the case with discussions of important social issues in which the discussants often use abstract terms such as "society", "liberal", "conservative", "freedom", etc.

5. To summarize, show a transparency dealing with two common causes of failure in communication: 1. The speaker assumes that everyone knows what he is talking about; 2. The listener assumes he knows what the other person is talking about. Suggest the "remedy": Ask questions.

6. Point out to the students that a questioning process which pushes toward specificity can generally be used to clarify discussions. Then show a transparency that suggests kinds of questions that are helpful in being certain that communication takes place in a discussion. (1. Are you saying that. . .? 2. When you made that statement, this is what I thought you meant. . .Is that correct? 3. When you said. . ., did you mean. . .?)

7. Next, break the class up into groups of no more than 10 each. Give the following instructions: "You are to discuss the case which I will give you. Try to come to a unanimous decision on a solution to the problem presented by the case. The discussion will have one basic ground rule: *You cannot make a statement of your own until you have repeated the previous person's statement and he agrees that you have stated what he meant to say"*. The teacher may pick any case which seems appropriate.

   Choosing a case of interest to the students is important, but students may get involved in the discussion and forget about the rule of repeating the previous statement. Some "supervision" to see that the discussion rules are followed is important. The teacher might assign a student in the discussion group the task of monitoring the discussion and reminding the other students when they forget the rules.

8. In the large group again, ask specific students to report on: (a) Were the groups successful in always repeating the speaker's statements? (b) How often was one repetition successful? Was it ever necessary for the listener to make more than one repetition? (c) How often did the speaker change his statement in the light of the attempts to clarify it? (How often did the speaker find out he hadn't said what he expected?) (d) Was agreement always reached on what the speaker intended to say? The point to be emphasized is that clarification of communication is a double-edged sword: The listener may not get the meaning the speaker intended; or the speaker may not have said what he intended to say.

9. Note for the student that the same problem of communication exists with written material, but that we usually don't have the opportunity to question the writer about his intentions.

10. Emphasize for the students that this questioning procedure, if handled with good sense and with agreement among the participants as to what is being done, so that people are not antagonized, is useful to insure communication in all discussions. Of course, all statements will not need to be repeated in most discussions, but it is good to be alert to the possibility of the need for repetition and clarification.

11. Note, however, that one cannot always assume that the repetition process is being used in good faith. People may rephrase what other people say, not to clarify what is said, but to change the other person's position. Show an overlay illustrating the use of persuasion in the guise of clarification (e.g., Jane: "I am against capital punishment". Mary: "You mean that you are in favor of coddling criminals?"). Point out that sometimes a person doesn't seem to be repeating what a speaker said in order to determine if he understood the speaker's intent. He may be trying to get the speaker to consider some implications of his position statement. In either case the speaker may reply that that is not what he intended to say. Or, using other concepts in the Outline, he might, among other things, raise a value question, question the use of emotively loaded words, or question assumptions.

BUNDLE 18A: CONCEPTS IV. A. 2. a. & b. 2.

Note to the Teacher

There are a number of concepts that cluster together for this bundle and Bundle 18B. To make handling the suggestions seem like a more manageable task, the suggestions have been split into the two bundles. Actually, because the concepts do fit together, they are easier to teach than may seem at first glance. (Concept IV. A. 2. was taught in Bundle 12. There are no suggestions for teaching it in Bundle 18A or 18B, but the teacher may want to refer to the earlier lesson.)

Note on Purpose

The analysis of public controversy centers on three separate types of disputes: definitional or word disputes, factual disputes, and value disputes. The present teaching bundle breaks from the trend developed in previous bundles where the general nature of language was handled, and deals specifically with word disputes. Because of this change in emphasis, the teacher may be required to make a transitional statement such as the one found in teaching suggestion number one. Part B of this bundle is closely related to Part A, and cautions the student on the use of some of the concepts taught in Part A. This separation is only for convenience and is not intended to indicate a distinct demarcation in the Outline of Concepts.

Objectives

The student should be able to: select, from a number of alternatives, correct definitions for and examples of the differing types of definitions; write or give verbally definitions for and examples of the types of definitions; use appropriate types of definitions during discussions.

Teaching Suggestions

1. Use a transparency which reminds the students that ethical disputes are generally made up of definitional or word disputes, factual disputes, and value disputes. Give a brief example of each type of dispute. Then tell the class that the next emphasis will be on the recognition and handling of definitional or word disputes.

2. Point out to the class that previous lessons on language have been taught to make the students more sensitive to the central role of language in thinking about and discussing public controversy. Class time has also been spent in developing awareness of differences in word usage that need to be clarified if thinking about and discussing public issues are to be fruitful.

3. Note that once people are aware of disagreement over the meaning of a word, (a definitional dispute), it does not make sense to try to find out what the 'real' meaning of the word is. Since words have no natural

meaning, a more reasonable approach is to attempt to reach an agreement on how the word should be used in that particular situation. (This concept is taught in Bundle 14.)

4. Explain that a dictionary may be helpful in clarifying the meaning intended for a word, and may be sufficient to handle the problem. However, dictionaries have weaknesses: (1) They only tell us how words have been used. (2) Often dictionary definitions are out-of-date and new words may not be included. (Refer to Bundle 14 on changing word meaning.) (3) Dictionary definitions are often vague or circular (e.g., to define a tool as an implement and an implement as a tool).

5. The following point should be stressed by the teacher: *Since dictionaries are only partially reliable in solving word disputes, people involved in the dispute frequently have to develop their own definitions.* In doing so, one or more types of definitions will likely be used.

6. Next, show a transparency that lists three types of definitions: 1. example; 2. synonym; 3. criterial.

7. The following outline will help the teacher structure a discussion of the uses, and strengths and weaknesses, of the different types of definitions. A series of stick-figure cartoon transparencies could be used as illustrations.

   A. There are two types of *definition by example.*

      1. The first type of definition by example is the *pointing definition.*

         a. When using a pointing definition the speaker simply points to an appropriate object and says something like, "There's one," or "I mean that".

         Example: A. "What is a Saab?"

         B. "Do you see that small car parked across the street? That is a Saab."

         b. Pointing definitions can be improved by specifying the particular object or part of the object intended, or excluding those not intended.

         Example: A. "There are two cars across the street. Which is the Saab?"

         B. "Not the square one. The Saab has a rounded hood".

         Example: A. "What is a fetlock?"

         B. (pointing to a nearby horse) "That's a fetlock".

         A. "A horse is a fetlock?"

B. "No. The part above the hoof".

A. "You mean the legs, belly, head, neck, and tail?"

c. Pointing definitions are not as useful if the object in question is not present, or if the word to be defined is not an object to which one can point.

Example: A. "What does President Johnson mean by the principle of 'territorial integrity of all nations'"? (Obviously pointing at 'the territorial integrity of all nations' is impossible.)

B. (sarcastically) "The next time I see one I'll point it out to you."

d. Pictures or drawings may be used as a kind of pointing definition. There is no transparency for this idea, but the example could be given orally.

Example: A. "What is the difference between a 'demonstration' and a 'riot'?"

B. The person might answer by showing two pictures. In one picture, people are marching in orderly fashion. In the other people are breaking windows, setting fires, etc.

2. Pointing definitions, then, are one kind of definition by example. Definitions can also be given by citing *verbal examples*.

Example: A. "What do you mean when you talk about 'the more responsible negro leaders'?"

B. "I mean men like Roy Wilkins and A. Philip Randolph."

Example: A. "What do you mean by the 'imperialist powers'?"

B. "I mean the United States of America, Britain, West Germany, Japan. . ."

a. Definition by verbal example can be improved by specifying the parts of the example you want to include and exclude.

Example: A. "Would you define 'responsible negro leader' to include someone like Martin Luther King?"

B. "Yes. I also would include someone like James Meredith, but not Stokely Carmichael or Adam Clayton Powell." (It might be necessary to point out to the students that you are using this as an example, and do not intend to be passing judgment on the men. For the purposes of your example, you could have very well reversed the names of the men used.)

3. A weakness of definitions by example (both verbal and pointing) is that they do not tell you which are the vital characteristics of the thing being defined. Therefore, the definition may remain vague and confusing. For instance, if a person "pointed" to the Soviet Union as an example of an aggressive nation, another person might think that only communist nations were meant to be labeled as "aggressors". To define the word "animal" by verbal example might require naming an endless list of examples of those things included such as dog, cat, kangaroo, bat, or burro, and an equally long list of those things excluded such as tree, rock, dirt, metal, etc.

B. People do not always attempt to define words by offering examples.

1. Definition by synonym or antonym may be used.

Example: A. "What's love?"

B. "Madness."

A. "What is a nonreimbursable loan?"

B. "Oh, that's a fancy word for gift."

A. "What is the Premier in a government?"

B. "He's the Prime Minister."

2. The reverse of definition by synonym--defining a term by citing an antonym--can also be useful.

Example: A. "What does 'industrious' mean?"

B. "It means the opposite of lazy."

3. Many *synonyms* have only *approximately the same descriptive and emotive meaning as the word being defined.* Many *antonyms have only approximately the opposite meaning as the word defined.* They, therefore, only give approximate definitions. Also, words (synonyms) that may be similar in descriptive meaning may not be similar in emotive meaning, and vice versa.

Example: A. "What does 'nigger' mean?"

B. "It means the same as 'negro'."

A. "Then why do people object to being called 'nigger'?"

B. "Well, they don't mean quite the same thing."

Example: A. "What does 'murder' mean?"

B. "It means the same as 'kill'."

A. "Our soldiers are murdering people in Vietnam?"

B. "No. 'Murder' and 'kill' don't mean quite the same thing."

4. Defining a word through a synonym or antonym is only useful if the listener knows the meaning of the synonym or antonym.

Example: A. "What does 'Premier' mean?"

B. "It means the same as 'Prime Minister'."

A. "That's nice. What's a 'Prime Minister'?"

C. After treatment of definitions by example and synonym, the teacher should point out that the above types of definitions are most useful when the problem of clarification is not serious. When the listener is not quite certain of the meaning intended by the speaker it is often only necessary for the speaker to briefly cite an example or synonym. However, when the word in question is quite important to a discussion and/or if the discussants seriously disagree over the meaning of the word, then a more precise type of definition is often needed.

1. A word dispute where the speaker and listener do not have a serious problem of clarification might be like the following interchanges. The participants are not having a heated dispute over the term, and a brief definition is suitable.

Example: A. "I'm not quite certain what you mean by 'conservatives'."

B. "I was using the term rather loosely, but in general I mean large groups of people from Eisenhower and Nixon to Barry Goldwater and those who are even more to the Right than he is."

2. In the following example there is a serious dispute over the word 'aggression." This dispute is not likely to be resolved quickly by giving a few examples or offering some synonyms. The clarification needed in order to resolve the dispute will likely require a much more detailed and careful process of definition.

Example: A. "Look, you have used the word 'aggression' several times now. I'm having difficulty knowing what you mean."

B. "I don't see the difficulty. 'Aggression' means that one nation attacks another first."

A. "Well, I don't buy that at all. Do you mean that one nation can move its armies up to another nation's borders, cut off its supply routes and promise to destroy the other nation; but if the nation being threatened attacks first, it is the aggressor?"

B. "I don't know how you could call the first nation an aggressor as long as it stayed on its own soil."

D. Criterial definitions should be used when detailed and careful definitions stating the essential characteristics of the thing being defined are required.

Detailed and careful definition, stating the essential characteristics of the thing being defined, is often required. This type of definition is called a *CRITERIAL DEFINITION.*

Example: A. "Look, you've used the word 'aggression' several times now. I'm having a difficult time knowing what you mean."

B. "I believe that aggression has the following characteristics:

1. It's a deliberate act.
2. Performed without cause.
3. By one or more nations.
4. Against one or more other nations.
5. With the intention of endangering the security
6. Or basic welfare of those nations."

1. It may be helpful to first state the more general characteristics and then work toward the more specific characteristics that distinguish the thing being defined from things that are nearly like it.

   Example: (See the example above. Note that a "deliberate act" is very general. There are a great many kinds of deliberate acts. Each of the characteristics listed later tells us specifically what sort of deliberate act we are talking about.)

2. It is not at all necessary for the definition to be stated in the formal way the above definition is stated.

   a. It may actually interfere with the definitional process, in the context of a discussion, if we stop and think "now what is the most general characteristic, and what comes next, etc." Although when we have had sufficient time to think about the definition we intend to use, it is helpful to be able to state the most important points in some orderly fashion.

   b. It is not necessary, in the context of a discussion, to stick to one method of defining a word. It may be helpful to use synonyms, give examples, state characteristics, and even draw pictures. The only necessary aspects of a definition are that it include all that the definers want included, exclude what they want excluded, and that it be clearly understood by the people involved.

Example: A. "What do you mean by the word 'demonstration' when you talk of civil rights demonstrations?"

B. "Well, first I mean the opposite of 'riot.'" (Negative definition. Definition by antonym.)

I have two pictures here. I call this one a riot. I call that one a demonstration. (pointing definition) I would call something like the march on Selma, Alabama, a demonstration. I would call the trouble in Watts, California, a riot. (definition by verbal example) I think the essential characteristics of a demonstration are:

1. The people involved have some well defined and openly stated goal. They have some clearly understandable purpose.

2. The people involved behave in an orderly fashion.

    a. Property is not damaged.

    b. Other people are not physically harmed or personally abused.

3. If laws are broken they are broken not in the heat of the moment, but cooly and deliberately in accordance with the stated purpose of the demonstration. (Definition by offering essential characteristics. Note that this definition, unlike the one for "aggression" does not begin with the general and work to the specific.)

A. "If five men announced that their purpose was to kill the Secretary General of the United Nations, and then did so in an orderly and cool-headed fashion, would you call that a demonstration?"

B. "No. Under my definition of 'demonstration', other people are not physically harmed or personally abused."

8. Use a transparency containing notes on the use of definitions as a review of the different ways language disputes can be resolved.

BUNDLE 18B: CONCEPTS IV. A. 2. b. c. & 3.

Note on Purpose

As mentioned earlier, Bundle 18B is an extension of Bundle 18A. The first part of the bundle is intended to acquaint the students with the process of definition. This part of the bundle is intended to acquaint the students with the idea of stipulating definitions (that is, agreeing to use a word in a specific way during a discussion when the discussants cannot agree on the best definition), and to emphasize some cautions to be exercised in handling word disputes. The bundle also touches on the difference between deciding how to define a word and deciding, once a word is defined, if something fits the definition. The latter decision is an empirical decision involving judgments of fact as to whether or not the thing being classified actually has the requisite characteristics.

Teaching Suggestions

1. Bundle 18A concluded with a summary of the ways of defining terms. At this point, it may not have occurred to the students that it might be difficult to reach agreement on the definition of a term. Point out to the class that occasionally people disagree so strongly over appropriate word meanings that it is difficult and time-consuming to try to come to an agreement about how to use a term. At the same time, it would be unfortunate for the discussion of an issue to become sidetracked because of a definitional dispute. Ask the students, "What should be done when the people discussing an issue are deadlocked over the best meaning for a word or term?"

2. Possible answers to the above question include: A different word may be found which has similar meaning (a synonym) and which both persons can agree is applicable. Or, the participants in the discussion may agree that, rather than argue about the best meaning, they will just agree to use the term in a certain way *during this discussion*. The latter suggestion is an instance of *stipulating* a definition. (As *stipulate* may be a new word for some students, it should be written on the board or overhead.) The first instance actually involves definition by synonym (it is agreed to use a synonym instead of the word being argued about). Stipulating a definition usually involves a criterial definition, with verbal examples often also included for clarification. The following example might help to illustrate the point:

   > Two people arguing over whether students should have to pass entrance examinations to be admitted to an "institution of higher education" might disagree over the meaning of "institution for higher education." As they try to clarify what each means, it becomes clear that one person includes trade schools in his definition while the other includes only four-year institutions leading to a bachelor's degree. With these differing ideas as to what an "institution for higher education" is, discussion is not likely to be fruitful. After some discussion, they might agree to use the word "colleges" instead of

"institutions of higher education." Or, they might agree (stipulate), for example, that for the purposes of their discussion, "institutions of higher education" would be taken to mean "colleges or universities offering four-year courses leading to the bachelor's degree". This would focus their discussion on a particular type of institution. They might, of course, want to argue another time about whether trade schools should be considered "institutions for higher education" and about whether entrance examinations are appropriate for trade schools.

3. Point out that there are some cautions to be observed in arriving at definitions so that the process of thinking and discussion will be helped rather than hindered. A transparency summarizing Concepts IV. A. 2. c. will be helpful.

4. Make up a tape recording of two men arguing, for example, over whether the United States is an imperialistic nation. One of the disputants should show confusion over whether *imperialism* has a "real" meaning, and different types of definitions should be used in an attempt to move to the point where determination can be made about factual claims about the United States' domination of the other nations. This tape will be referred to here as the "Language Dispute" tape.

5. Play the "Language Dispute" tape to a point where it becomes clear that the men are having a word dispute. Stop the tape and ask the students to identify the type of dispute.

6. Hand out to the students a transcript of the tape recording. Ask them to mark on the transcript, as they listen to the rest of the tape, the different kinds of definitions used. Ask them, also, to be alert to places in the dialogue which illustrate different points already discussed about the process of defining words.

7. Play the tape through once. Then go back through it, pausing to discuss the examples of definitions found by the students. Also, ask questions to bring out the illustrations in the dialogue of previous points discussed about the defining process.

8. Summarize by pointing out that a definitional problem was central to the discussion, that the definition of the term "imperialism" was important if their thinking and discussion were to be fruitful, but that they arrived at a definition and then (at the end of the tape) were ready to move on, not allowing the definitional dispute to sidetrack the discussion of the issue.

9. Point out that now that the men have arrived at a definition for imperialism (e.g., "control of, or extreme influence over, one nation by another"), they face another kind of problem in their discussion. "What is the kind of problem or dispute they are now likely to face?" (The desired answer is that they must now decide if the United States does in fact fit the definition. Or, put another way, should the United States be categorized as "imperialist"? Is the influence of the United States in Latin America so great that it should be considered "imperialism?") As the question, as worded above, is vague, students may give other reasonable answers without coming up with the idea that a factual question

must now be dealt with. The question may need to be rephrased something like: "Now that a definition has been stipulated for the term "imperialism" what factual question needs to be dealt with?"

10. Point out that once a term is defined, the task of determining whether something fits the term is a factual one: Does the thing in fact have the characteristics in the definition? Criterial definitions are important here, for they tell what characteristics a thing must have to have the term applied to it.

11. This would be a good time to point out two other ideas to the students:

    a. *The use of definition does not end once the discussants turn to a factual question.* Ask the class if there are any vague words in the stipulated definition of "imperialism" that might have to be defined in order to answer the factual question about whether the United States is "imperialistic." (For example, some definition of "extreme" would probably be necessary in order to decide whether any influence by this country was "extreme.")

    b. *Sometimes, after a word is defined, further examination will indicate that the definition does not include some examples which the discussants think should be included, or that some examples are covered that should not be.* For example, it might be pointed out that since World War II, the United States has had a great deal of influence (what might even be considered "extreme" influence) in Japan. Commentators have noted the "Americanization" of styles, modes of life, government, etc. Yet, this might not be considered an example of imperialism as stipulated. This discovery would likely lead to a redefinition of the term so that this sort of influence would be excluded.

12. Assign homework in which the students are asked to define terms in different situations (for example, in English class, for a foreign student). Ask them to give a definition and defend use of a type (or types) of definition.

BUNDLE 19: CONCEPT IV. B. 1.

Note on Purpose

Students were introduced to the definition of political-ethical disputes in Bundle 1. At that time a distinction was drawn between ethical questions and non-ethical questions. At this point in the Outline, the use of the term "non-ethical questions" should be discontinued and the student's attention should be shifted to specific types of non-ethical questions such as factual questions. The distinction between ethical questions and other types of questions is still important, however, and some effort should be made to determine whether the student can recognize ethical questions when they encounter them. It should be kept in mind that the specific concept to be taught is that ethical questions frequently cannot be answered until pertinent factual questions are dealt with.

Objectives

When asked to take a stand on a political-ethical dispute the student will state his position as being contingent on the answer to pertinent factual information. When probing the factual information pertinent to a political-ethical dispute, the student will raise questions relevant to precedent, concurrent, and consequent events.

Teaching Suggestions

1. Describe the Pueblo incident to the class. (Do not, however, give the students very much information. Later, when they are asked to decide what should be done about the incident, it is anticipated that they will ask for more information. If they are given too much in the beginning, they may not feel the need to raise factual questions later.) Show a transparency that gives a brief account of the capture of the Pueblo. For example:

    > The Pueblo is a United States Navy spy ship which was used to monitor radio broadcasts off the eastern coast of North Korea. In late January, 1968, the Pueblo was captured by North Korean patrol boats, and was hauled into the port of Wonsan where the ship and its crew were held captive. Many Americans were angered by what appeared to be an act of war committed on the high seas. Congressman William Bates, senior Republican on the House Armed Services Committee, called the incident "A dastardly act of piracy!" Senator Frank Church of Idaho said that: "The ship must be returned at once with all Americans aboard. Our national honor is at stake." Utah's Republican Wallace F. Bennett said that the United States should send "an armada steaming into the Wonsan harbor, throw a tow rope around the Pueblo and get her out of there." (Paraphrased from TIME, February 2, 1968.)

2. Ask the students what they think the United States should have done about the Pueblo. In the discussion that follows this question, students will probably base their responses on various factual claims and assumptions. Some students may even point out that they cannot give an answer to the political-ethical question without first raising some factual questions. If none of the students makes this point the teacher should do so. The teacher should also point out the difference between factual and ethical questions. (What should the United States have done about the Pueblo is basically an ethical question. What would be the consequences of a recommended course of action is a factual question.)

3. After the above distinction between ethical and factual questions is made, point out there are three types of factual questions that are pertinent to political-ethical disputes:

a. Some factual questions are concerned with the past. ("What conditions lead up to the Pueblo incident?" "Had the Pueblo violated North Korea's territorial waters on previous occasions?")

b. Some factual questions are concerned with the present state of affairs, or with the state of affairs that existed at the time the incident occurred. ("Was the ship captured on the high seas, or was it captured in North Korea's territorial waters?" It would be helpful to show a transparency map showing the Pueblo's position as claimed by the United States and by North Korea.

c. Some factual questions are concerned with the future. These questions are concerned with the consequences of following a course of action. ("What would happen to the crew of the Pueblo if the United States attempted to recover the ship by force?" "Would a show of force by the United States lead to another Korean War?")

4. After the teacher has offered the above examples of types of factual questions, the students should be asked to offer examples of each. Have the students relate their examples to the Pueblo incident.

5. For a homework assignment students could be required to ask three factual questions concerning the political-ethical dispute: Should the United States withdraw its military forces from South Vietnam? One question should be concerned with the events leading up to the conflict in Vietnam, one with the present nature of the conflict, and one with what will happen if we withdraw from Vietnam. The students could also be required to answer their questions, stating the reasons for their answers.

BUNDLE 20: CONCEPT IV. B. 2.

Note on Purpose

The intent of this lesson is to lay the groundwork for studying the verification of factual claims. The verification problem differs for *specific* and *general claims*, and for claims based on a sample and claims based on a *summation* of specific claims, so these terms are defined. Terms discussed in this bundle such as "sample", "population", "specific claim", and "general claim", will be handled in more detail in later teaching bundles.

Objectives

1. Students should be able to select the proper definitions of *population* and *sample* from a list of definitions. They should also be able to write a definition and give examples of each term.

2. Students should be able to select the proper definition of *specific claims* and *general claims* from a list of definitions, and they should also be able to write a definition, and give examples of each term.

3. Students should be able to recognize in written paragraphs or in discussions when other people are making specific or general claims, and when general claims are based on summation or sampling.

Teaching Suggestions

Note to the teacher

This teaching suggestion is intended to define two terms--sample and population. To obtain the interest of the student and to demonstrate to him the relevance of the items to social and political concerns, this teaching suggestion is set in the context of a problem. It is not intended to be a thorough introduction to the problems of sampling.

1. Ask the class to suppose that a senator from their state is trying to decide how to vote on a new civil rights bill. Before making up his mind he wants to find out how the voters in the state feel about his bill. There are several methods that he can use to attempt to determine the sentiments of the voters.

    a. Show a transparency that suggests methods the senator could use to get the voters' feelings. Tell the students that the civil rights bill comes up for vote within one week, and ask them which method the senator should use to determine how voters in his state feel about the bill. (Methods: 1. Interviewers contact each voter in the state. 2. Mail questionnaires to all voters. 3. Call every 1000th person on the list of voters. 4. Call all of the voters.)

    b. The students will probably recommend method #3 because of the limited time before the civil rights bill is brought to a vote. Regardless of which method the students think is best, *ask them how method #3 differs from #1, 2, and 4. Or ask them how methods 1, 2, and 4 are alike.*

    c. The students will probably say that methods 1, 2, and 4 require a survey of all of the voters, but that method 3 requires a survey of only one voter in one thousand.

    d. Tell the class that we have one word which refers to all of the members of a group, and we have another word which refers to only some of the members of a group. The two words are "population" and "sample".

    e. Show the class the upper half of a transparency containing the words "population" and "sample" and ask them which of these two words is used to refer to only some of the members of a group, and which word refers to all of the members of a group.

    f. Show the class the bottom part of the transparency with the definitions of population and sample. [Population: all of the members of a defined (stipulated) group. Sample: some of the members of a defined (stipulated) group.] Call special attention to the word "defined" (stipulated) in the definitions. Explain that most of the populations that we will be talking about are defined groups in that we decide what groups we are interested in and define (stipulate) the limits or boundaries of the group. For instance, when we want to examine the characteristics of voters we decide which group or population of voters we are interested in. In the hypothetical problem concerning the Senator (referred to above) we decided that the population would be registered voters in the state. This then, became our defined (stipulated) population.

g. Show a transparency that contains examples of populations and samples and ask the class to identify which is which.

h. Point out that a group that is a population in one case can be a sample in another and vice versa. This depends on how we stipulate the limits of the group. All of the players on the high school basketball team make up a population of the school's ball team. However, they are only a sample of basketball players in the state.

i. Tell the class that some ways of selecting a sample are better than others, and that we will discuss what makes a good sample in a future lesson.

Note to the teacher: A major transition occurs at this point in the lesson.

2. Explain to the class that we are concerned with the difference between populations and samples because some factual claims are based on samples, and the validity of those claims is at least partly determined by how the sample is taken. Other factual claims are not based on samples, and therefore, the way we verify those claims is in some ways different. Because the process of verification is different for different types of factual claims, we will now attempt to distinguish some of the types of factual claims.

3. Tell the class that one useful way of classifying factual claims is to categorize them as *specific claims* and *general claims*. Show a transparency that contains pairs of specific and general factual claims and ask them which are specific factual claims and which are general factual claims. Discuss their responses. (The students have had several opportunities in previous lessons to distinguish between general and specific terms. It is not anticipated, therefore, that this part of the lesson will give them any difficulty.)

4. Point out to the students that they have successfully distinguished between general and specific factual claims. Ask them to attempt to define "general factual claim" and "specific factual claim". (Be patient when they attempt to define these terms. It is more difficult for the students to define terms than it is to use them in a concrete setting.)

5. Students will probably be slightly frustrated in their attempts to define "specific factual claims" and "general factual claims" and will therefore, be open to suggestions by the instructor.

a. Show a transparency containing the definitions of specific claims and general claims. Read the definitions and have the students copy them into their notebooks. (This may appear to be an uneconomical use of time--the definitions could just as easily be mimeographed and given to the students--however, copying the definitions may cause the students to focus more directly on them.)

b. In directing the students' attention to the definitions of specific and general claims stress particularly two parts: (1) *the idea of particular time and place in specific claims, and* (2) *the idea that general claims are based on a number of specific or less general claims.* Tell them that one of the most useful ways to determining whether a claim is general or specific is to ask yourself whether it can be broken down into two or more other claims.

c. Tell the students that they are going to be given examples in which it is difficult to determine whether the claim is specific or general. Show them a transparency containing examples of specific and general claims, and tell them that they are to use the definitions to help them decide whether each claim is specific or general. Go over the list claim by claim. Ask several students for their opinions on each claim, and have them explain their choices.

d. Use the same transparency to illustrate how general claims are based on--can be broken down into--two or more other claims.

e. Go over the above transparency claim by claim and ask several students if they think the claim needs to be broken into claims which are more specific before it can be verified. Have them explain their positions.

6. Tell the class that not all general claims are based immediately on "specific claims". Rather a general claim may be based on a more specific but still general claim which in turn is based on a specific claim. To illustrate this point, show a transparency containing claims of varying degrees of generality and specificity. (Claims could be taken from "Almost All Generals are Almost Always Wrong About All Wars". Stewart Alsop, *Saturday Evening Post,* August 26, 1967, p. 14.)

   a. Ask the class which of the statements makes the most general claim.

   b. Ask the class which of the statements is the most specific.

   c. Point out that some relatively specific claims are used to support some other more general claims. Ask the class to offer examples from the transparency.

   d. Finish the presentation of this part of the bundle by reviewing the transparencies defining population and sample, and specific and general claims.

Note to the teacher: Another major transition occurs at this point. Here we introduce several rather complex definitions concerning *inference* and *summation claims.*

7. Ask the class if the claim, "almost all generals are almost always wrong about all wars", could be verified by examining the entire population. (The answer is, "no". Some generals have lived and died without leaving any historical record of their lives or thoughts.) A follow-up question should then be asked like, "How then can the claim be verified?" (The answer is "by taking a sample of all the generals who have kept a record of their lives and thoughts".) Once we have a sampling of the records which have been left, we can make an *inference* whether most generals have been right or wrong about wars.

    a. When verifying claims through the use of a sample, it is necessary to make an inference; that is, from information we have gathered about a small but representative fraction of the whole, we can infer or make a statement or prediction about the whole. As an example: Assuming that there are 1000 students in this school and we were told that very few of them like chocolate ice cream, we could sample a portion of the 1000 and either prove or disprove the claim. If we questioned 100 students, chosen at random, and found only three who liked chocolate ice cream, it would be correct to infer from the sample that "most students in the school disliked that flavor". (An inference involves that logical leap from what we know to be certain, to what is probably also true.)

    b. Inferences are less important when we verify a claim by surveying a population. As an example: We could interview each student at the school concerning their ice cream flavor preference and compile 1000 responses. To verify the claim that very few students liked chocolate ice cream, we would merely have to add up the number of replies. No inference is required.* We could then make our statement, "thirty-three students in this high school like chocolate ice cream". This is called a *summation factual claim*. It was arrived at through an addition process, by adding up the 1000 specific claims.

8. Homework: Give the students mimeographed copies of Stewart Alsop's article, "Almost All Generals Are Almost Always Wrong About All Wars". Instruct the students to write a short summary of the article stating the central theme and how the author supports the theme. The students should note the most general factual claim, at least two moderately general claims, and at least one specific claim that are relevant to the central argument of the article.

    The following example should help the students to understand how to do the assignment.

    Most general claim:

    > There is a lack of respect for student rights on the campus of Utah State University

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*This statement is not technically correct. We assume that each party in the population reported the truth, and infer, therefore, that the findings are accurate.

Moderately general claim:

> The Standards Committee has acted in such a way as to legally browbeat several students into leaving the university.

Specific claim:

> In a recent case, the Standards Committee held a hearing without first notifying the defendant that the hearing was to be held.

9. If the students are to be assigned to read the book *How to Lie with Statistics** the teacher should anticipate the assignment at this point. (See Bundle 23A)

BUNDLE 21: CONCEPTS IV. B. 3. a. & b.

Note on Purpose

This is essentially a preview and a review lesson. The basic language subconcepts have been taught in the language section, and here they are to be applied to the problems of verifying factual claims following an overview of the elements in the verification of claims.

Objectives

The students should be able to identify the emotively loaded words or phrases in factual claims presented to them.

The students should be able to restate emotively loaded factual claims so as to remove the loading.

The students should be able to identify key terms which might need further specification if factual claims presented to them are to be verified.

The students should, in discussions, ask questions to pin point the need for greater specificity in factual claims.

Teaching Suggestions

1. The teacher can begin teaching this bundle by projecting an overlay which identifies some procedures and cautions in settling factual disputes.

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*Darrell Huff, *How to Lie with Statistics*. W. W. Norton and Company, Inc., New York, 1954).

a. Project a title (Settling Factual Claims)

b. Project an overlay #1 (listing the different types of claims). Explain that these concepts were taught very recently, and that students should understand the difference between specific and general claims, and should be able to identify a summation factual claim and an inferential factual claim. (You may want to test orally several students' ability to do so.)

c. Project an overlay #2 (calling attention to the descriptive and emotive meaning of language in verifying claims). Explain that the program for the next few days is designed to teach students how they can verify factual claims. One of the first problems which ought to be taken into account is that of language. Word meaning and emotive loading must be examined.

d. Show an overlay #3 (evaluating evidence). Tell the class that it is necessary to evaluate the source of evidence if a claim is to be verified. Questions must also be asked about the observers and reporters of events. Questions must be asked concerning specific and general claims like: How were the facts obtained? Were they totaled correctly? If a sample was used, was it properly selected?

e. Show an overlay #4 (examining assumptions). Most claims are based on assumptions, these must be identified as part of the verification process.

f. Show an overlay #5 (questioning proof by analogy). Explain that many times analogies are used to prove or disprove a claim. An awareness of the nature of analogies will help students to handle this technique.

g. Show an overlay #6 (how sure are you?). Tell the class that few claims are either all right or all wrong. For that reason it is helpful to deal with them in terms of probability of rightness and wrongness.

h. Explain to the students that with this brief preview, they have a general idea what direction classwork will be going for the next few days. Tell them that occasionally you may refer to these overlays as a form of review.

2. Project an overlay containing the statement: The American Bully frequently violates the territory of other nations.

3. Ask the students:
"What sort of statement is that?" "Is it an ethical claim, a factual claim, or an attempt to offer a definition?" "Is it a general statement, or a specific one?" (The students should be able to recognize the statement as a general factual claim.)

4. Ask the students:
"Is this claim true?" "If it occurred in a discussion, what would be the best way to respond to it?" "How could you respond to this statement and maintain a fruitful discussion? "Is there anything in the wording of

this particular statement that might tend to block rational discussion?"

(The students might recognize that the word "bully", and perhaps the word "violates", carry emotive loading that can arouse emotions and block fruitful discussion. The students might also suggest that some of the terms in the statement require specification or definition before a discussion can be made as to its validity. And some students might suggest that in order to verify the general claim it might be necessary to determine what specific claims it is based on.)

5. Ask the students:
   "If in a discussion someone made the statement 'The American Bully frequently violates the territory of other nations', what questions could you ask in order to get him to state more specifically what he meant?"

   Show the class overlay #2 which illustrates examples of questions which could be used to get the speaker to state more specifically what he meant by "The American Bully frequently violates the territory of other nations."

6. Ask the students:
   "How could we restate the general factual claim so that it is both more specific and has less emotive loading?"

   Project overlay #3 to show the students an example of the general factual claim restated so that it is both more specific and has less emotive loading.

7. Project a transparency which presents the concepts upon which this lesson was based, and use the transparency for a brief summary of the lesson.

8. Give a homework assignment that gives the students practice in identifying language in claims that may cause emotional reaction to the claims and affect the willingness to accept or reject the claim. Such statements can be made up or taken from current periodicals. It would be a good exercise to have the students rewrite the claims to give them clearer descriptive meanings and to reduce the emotive language.

BUNDLE 22: CONCEPTS IV. B. 4. a. through 3. (except IV. B. 4. c. 3.)

Objectives

In discussions of public issues, the student will ask questions about statements presented as evidence for factual claims. These questions will reflect the content of the subconcepts of IV. B. 4.

Teaching Suggestions

1. Ask the students to each take out a piece of paper. Have them write down briefly what happened during the previous social studies period. Allow a

few minutes for the writing, and then have individual students read aloud what they have written. There will probably be differences in the accounts. Note these and some possible reasons for the differences based on the earlier study of selective perception and retention and dissonance.

2. Point out that whenever we try to find out about past events, there is the problem that the witnesses (those there), if any, cannot have seen all that goes on nor remember all that went on to report it. What is seen, remembered, and reported is screened through the person's frame of reference (including his perceptual sets). So it is important to ask questions about any observer, or witness, to determine how adequate his information is. It is also important to ask questions about the adequacy of reports of the observations, such as in newspapers, magazines, or over radio and television.

3. Point out that some questions are obvious, such as "Are the observer's senses adequate?" A nearly blind man reporting on what he saw, or a deaf man reporting on what he heard, would raise obvious doubts about the adequacy of the observations.

4. Point out that there are some questions that might not be so obvious that are helpful in deciding if observations or reports are adequate. Give the students a list of "Questions for Verifying Factual Claims" based on Concepts IV. B. 4. a. through e. Discuss the questions to be sure the students understand them.

5. Homework exercise:

   a. Have the students read Tom Wicker, "A Reporter Must Trust his Instinct," *Saturday Review,* January 11, 1964, pp. 81-82, 86, and William J. Lederer, *A Nation of Sheep,* New York: W. W. Norton & Company, Inc., 1961, pp. 124-140, and identify examples which illustrate the difficulties in observing and reporting events, and the necessity for the reader to critically evaluate the reports.

   b. In the following readings the students are to find instances where one or more of the "Questions for Verifying Factual Claims" should be asked. Each reading will not contain an example of every question, nor will examples be found in the order that the questions are listed. For some questions, several examples can be found and for others possibly only one.

      "The Hungarian Revolution" and "A Soviet Tourist in Budapest", in Edwin Fenton, *Teaching the New Social Studies in Secondary Schools: An Inductive Approach,* New York: Holt, Rinehart, and Winston, Inc., 1966, pp. 160-164.

      "Expert Disputes Link of Crime with Firearms", *Salt Lake Tribune,* July 4, 1967.

6. On the day set for completion of the assignment in number 5, discuss it with the class. In the discussion concentrate on two things: (a) Sharing the examples which students found to illustrate the questions, being sure

that the students understand the questions, and (b) the "why" of each question to be asked of observers, reporters, and reports, tying each to the earlier lessons on perception, frame of reference, and the ways in which we handle dissonance.

(For example, whether the reporter has received his information directly from an eye witness is important because of the distortions that are likely to take place as messages are passed from person to person. This was illustrated earlier by the "Negro on the Streetcar" exercise which should be recalled by or for the students.)

BUNDLE 23A: CONCEPT IV. B. 4. c. 3.

Note to the Teacher

1. This lesson is intended to teach the following specific ideas:
    a. The term "average" can be misleading if the type of average is not specified (mean, median, mode).
    b. Averages can be misleading, even when the type of average is specified, if the report does not include information concerning the range or deviation from the average.
2. The teaching suggestions in this bundle were written with the assumption that students would have access to *How to Lie With Statistics*. However, the teacher should be able to adapt the teaching suggestions for presentation even if *How to Lie With Statistics* is not available for the students. For instance, the teacher might be able to obtain a copy and summarize its contents for the class. The teaching suggestions can be used without referring to *How to Lie With Statistics*, although reading it would provide the teacher with helpful background.

Objectives

1. When presented with a factual claim which includes the word "average" the student will indicate that further specification is needed.
2. When presented with the words "mean", "median", and "mode" the student will be able to associate each with its conventional meaning.
3. When presented with a brief, ranked distribution, the student will be able to compute the mean, median, and mode.
4. When presented with a distribution having different mean, median, and mode, the student will be able to indicate which type of average would probably be used to support different biases.
5. The student will be able to explain how dissimilar groups of data may have identical averages.

Teaching Suggestions

1. If the students have been assigned to read *How to Lie With Statistics*, tell them that today's lesson is based largely on ideas contained in that book. Ask the students, "What was the main point in the book? That is, summarize the main thrust of the book in one sentence". (Student responses will vary, but answers such as, "Statistics can be used to mislead people", or "Don't believe everything you read", "The way facts are presented can influence what we believe", are acceptable.)

2. Tell the students that one of the most commonly used and one of the most frequently misleading statistics is represented by the word "average".

   a. Show a transparency with the average annual income for three neighborhoods (Neighborhood A = $15,000, B = $5,000, C = $3,500) and ask the class to suppose that a certain city has enough money to hire one additional welfare worker. A decision has been made to place this worker in one of three neighborhoods. Considering only average annual income, the welfare worker would probably be placed in Neighborhood C ($3,500 per year), rather than Neighborhood A ($15,000 per year), or Neighborhood B ($5,000 per year).

   b. Ask the students to suppose that instead of three different neighborhoods there is only one neighborhood in question, and the city is trying to decide whether the people in that neighborhood need a welfare worker. A meeting is called and people are asked to testify. One person claims that the average income of this neighborhood is $15,000 per year. A second person claims that the average income is really $5,000 per year, and a third witness claims that it is only $3,500 per year. Now what should the city do?

   c. If students suggest that the city find out what the average income really is, explain that each figure is an average, but that each is computed in a different way. The following suggestions can be followed to teach the terms *mean, median* and *mode* and their methods of computation:

      1) Show the upper half of a transparency with the annual incomes of forty families on it selected to have a mean of 15,000, a median of 3,500, and a mode of 5,000. Tell the students that this transparency contains the incomes of the families in the neighborhood. Tell the class that the most common way of computing the average would be to add up the individual incomes and divide by the number of families. This is called the mean (the students may have learned to call it the arithmetic average). Show the bottom part of the transparency on which there is a definition and computational example for the mean, and go over it with the class.

      2) Repeat with a transparency with the same data, but the definition and computations for the median.

      3) Repeat with a transparency showing the same data, but a definition and computations for the mode.

d. Tell the students, "Assume that a person is against using taxes to pay the salaries of welfare workers. Which of the average annual incomes for the forty families would he probably quote to persuade someone that a welfare worker is not needed?"

"Which average would a person probably quote to persuade someone that a welfare worker is needed?"

e. Tell the students, "Newspapers and magazines seldom use the words 'mean', 'median', and 'mode'. They most often use the vague term 'average'. Since this term can be used with different meanings to support different biases, we need to be suspicious of its use".

f. *Practice:*

1) Tell the class, "We will use the terms 'mean', 'median', and 'mode' rather than the term 'average', for the remainder of this course. You will be expected to know the meaning of these terms and be able to apply them correctly". (Definitions and examples of the three types of averages are contained in Chapter 2 of *How to Lie With Statistics*.)

2) Tell the class, "Since you are expected to know the three types of averages, let's see if we've given you enough examples. Can someone name the three types of averages and tell how each is computed?"

3) As the students give their definitions, write the correct ones on the chalkboard.

4) Tell the class, "Now let's see if we can apply the definitions". Tell the students, "A small construction firm is owned by two partners who pay themselves $20,000 per year. They employ two skilled carpenters who earn $8,000 per year, and three laborers who are paid $4,000 per year. What are the mean, median, and mode of yearly salaries for this company? Use a pencil and paper if you need to".

5) Review the correct answers for the above question, and show how they were computed.

6) Ask, "If this company was bargaining with the union over wage increases, which average would the company probably give to a newspaper reporter in order to make its side look better? Which average might the union use to argue that a wage increase is needed?"

3. Tell the students, "We've emphasized differences between mean, the median, and the mode, because the word 'average' is frequently too vague and misleading. In some groups, however, the mean, median, and mode are identical, even though they are computed differently".

   a. Show the top half of the transparency *Wages Paid to Nine School Teachers.* Tell the class, "Assume that a small school district has nine school teachers. One makes $6,000 per year, 2 make $7,000, 3 make $8,000, 2 make $9,000, and one makes $10,000. Compute the mean, median, and mode for the salaries.

   b. After the students have computed and reported the three averages, show a transparency with the data grouped and say, "Groups of numbers, such as salaries, can be placed on a graph and a line drawn to show the shape of the resulting curve. When the curve is perfectly symmetrical (balanced) the mean, median, and mode are identical. We don't expect you to know how to make these graphs, but you should remember that the mean, median, and mode are not always different.

4. Tell the class, "We've seen that the word 'average' can mislead because the mean, median, and mode are sometimes very different. We've also seen that the mean, median, and mode are sometimes identical. We will now see a second way in which averages can be misleading: Sometimes the mean, median, and mode do not tell us all that we need to know about groups. The averages for two groups can be identical, but the groups can still be very different".

   a. Refer to Suggestion 2. a. and say, "Suppose a city can afford to hire a welfare worker for only one additional neighborhood. Two city councilmen are arguing over whose district should get the additional welfare worker. Neighborhood A claims that one third of the families in the neighborhood make less than the poorest family in Neighborhood B. The councilman from Neighborhood B, on the other hand, claims that one-third of the families in Neighborhood A make more money than the wealthiest families in Neighborhood B. Other councilmen suspect that there is something fishy going on, because the mean, median, and mode incomes are identical in both neighborhoods ($4,000). Can you explain how the claims made by both councilmen can be correct?"

   b. If the students do not come up with the answer, explain that the range of salaries can be very different even when the averages are identical. Therefore, groups with identical means, medians, and modes can be very dissimilar.

5. Review with the class the three main points of the lesson:

   a. "Average" is often too ambiguous, because the mean, median, and mode for a single group can be different.

   b. The mean, median, and mode for a single group are not always different.

   c. Because groups differ in range, the median, mean, and mode can be similar and the groups can still be very different.

BUNDLE 23B: CONCEPT IV. B. 4. c. 3)

Objectives

Given misleading charts or graphs, students will identify the missing or distorted sections.

If a trend is projected the students will identify the basic assumption(s) underlying the projection and identify questions that should be asked to determine whether the trend could be reasonably projected into the future.

Teaching Suggestions

1. Review the following points with the class:

   a. The present section of the Outline focuses on verification of factual claims.

   b. The reading assignment in *How to Lie With Statistics* (if used).

   c. Factual claims can be presented in different ways, and the way in which information is presented influences judgments concerning the data. (These are the main points in *How to Lie With Statistics.*)

   d. Some data can be reported as averages, and the type of average chosen can reflect the bias of the reporter.

   This review can be conducted by asking questions such as:

   What are the three main types of disputes with which we are concerned? (Language disputes, factual disputes, and value disputes.)

   What type of dispute have we been focusing on for the last few days ? (Factual disputes.)

   What does *How to Lie With Statistics* have to do with factual disputes? (This book deals with several ways in which factual claims can be distorted.)

   If a factual claim was presented in terms of averages, what would you want to know about these averages? (Are they means, medians, or modes. What reason does the speaker have for giving one type of average rather than another?)

2. Tell the students that graphs and charts are frequently used to present information, but that we need to be careful that the information is not misleading.

   a. Show the upper half of the *Cowboy* transparency and explain that this graph (*How to Lie With Statistics,* p. 50) appeared on a package of breakfast cereal. The vertical lines represent minutes that have passed since the time the cereal was eaten, and the horizontal lines represent the amount of energy that was released.

1) Ask a student to read the *Cowboy* graph and tell the class what it says. (What information does it pass along to the reader?)

2) If the student claims that the graph tells us very little, if anything, ask him to explain what he means.

3) If the student does not recognize that the graph contains very little information, ask him questions such as:

   "The graph says that the energy released after two and a half minutes was 10. What does that mean?"

   "Does this graph represent only the energy released by the cereal, or does it also include the energy released by the milk and sugar?"

   "How much cereal does a person have to eat in order to have this much energy released?"

   "Does the time begin after a person finishes eating all of his cereal, or does it begin when he takes the first bite?"

4) Show the bottom half of the transparency, and explain that even the advertising people knew that the numbers along the side of the first graph were meaningless. They didn't bother to put the numbers in on later versions of the cereal box.

b. Tell the students that there are other ways that graphs can be used to support the reporter's bias.

   1) Show the transparency *Gee-Whiz Graph: Govt. Payrolls* (*How to Lie with Statistics*, pp. 68, 69). Tell the class that both graphs contain the same information. One graph, however, makes it look as though government payrolls are up. On the second graph government payrolls appear to be stable. Ask a student to explain why this is so.

   2) If the class cannot explain the graphs, point out that the horizontal lines on the first graph begin at $19,000,000 and go to $20,500,000. The lines on the second graph begin at zero and go to $30,000,000.

   3) Point out that the first graph would probably be used by someone who wanted to claim that government spending took a sharp increase in the last quarter of 1937.

c. Tell the students that the graph they were just shown was changed by cutting off the bottom part and stretching what was left to distort the shape of the line. Show the transparencies "Superimposed Man" (*How to Lie With Statistics*, pp. 61, 62, 63) and tell the class that they show rather dramatically how a graph can be distorted by cutting off the bottom and stretching the remainder of the graph.

d. Show the top half of the transparency *Advertisement for Collier's* (*How to Lie With Statistics*, p. 65).

  1) Ask the students to explain how this graph has been altered.

  2) If the class does not recognize what has happened to the graph, point out that the graph maker wanted the graph to begin at zero, so rather than cutting off the bottom he cut off the middle.

  3) Show the bottom half of the transparency, containing the unaltered graph, and ask the students which graph would probably be used to illustrate a startling change between 1952 and 1953.

e. Explain that bar graphs are sometimes changed to pictographs, because the latter are more interesting.

  1) Show a transparency *Slobovia--U.S.A.* (*How to Lie With Statistics*, p. 68) as an example of how this can be done legitimately. (The bar graph should show that carpenters in the U.S.A. earn twice as many dollars per week as carpenters in Slobovia. The pictograph shows the Slobovian carpenter with one bag of money, the American carpenter with two similar bags of money.)

  2) Show a transparency *Slobovia--U.S.A. (#2)* (*How to Lie With Statistics*, p. 69) and tell the class that this pictograph is supposed to represent an American carpenter earning twice as much as a Slobovian carpenter. Ask the students what is wrong with this graph.

  3) If the students do not recognize the difficulty in this graph, point out that the American carpenter's money bag is four times as big as the Slobovian carpenter's. (It's twice as tall, but it is also twice as wide.)

f. Tell the class that maps can be used to present information in a misleading way.

  1) Show the class the two map overlays (*How to Lie With Statistics*, p. 103) and tell them that on one map the amount of money which is spent by the federal government in a single year is equal to the total income of the people living in the states which are colored red. Ask the students to guess which map is being referred to.

  2) If a student guesses that the above point is illustrated in both maps, ask him to explain why nearly half of the area on one map is red, and only a small part of the other map is red.

     If no student guesses that both maps illustrate the amount of money spent by the federal government in a single year, tell them that this is so and explain that New York and Pennsylvania are more populous than most of the western states.

g. Tell the class that graphs and charts are useful because they help us to see trends. For instance, during the 1950's there was a definite trend in this country for more and more families to buy T.V. sets. Sometimes it is useful to project these trends into the future. For example, it is useful for the government to predict future populations, and it is useful for companies to predict demand for their products. However, these predictions can be very misleading if present trends are uncritically projected into the future.

   1) Show the transparencies *Skyrocketing Cost of Carrying the Public Debt* and *College Students* (*U.S. News & World Reports,* 1966). Point out that both of these graphs were published in 1965 and that trends on each are projected beyond 1965. Although the trends on both graphs have fluctuated over the years, the prediction for future years is made by projecting the trend for 1965. Based on past performance, one would expect that sometime in the future the trend would change, and therefore, the prediction would be in error. If in 1958, for instance, someone had projected college enrollment for 1968, based on the 1958 trend, the prediction would have been about 1,500,000 students too small.

   2) Explain that T.V. sets in the United States increased by 10,000% between 1947 and 1952. If a person in 1952 had projected this same trend into the future he might have concluded that by 1957 each family would own 40 T.V. sets.

   3) Explain that the above mistake would not probably occur in real life, but less obvious mistakes frequently occur in projecting trends into the future, and we should be cautious about accepting factual claims based on such projections.

3. Review the following points:

   a. Graphs and charts are misleading if they are improperly or incompletely labeled.

   b. The apparent rate of change portrayed by a graph can be changed by cutting off the bottom, or cutting out the middle, and stretching the rest of the graph.

   c. Pictographs can be distorted by changing both the height and width of the pictures.

BUNDLE 24: CONCEPTS IV. B. 5. a. & b.

Note on Purpose

This bundle is not intended to present a step by step pattern for the verification of general factual claims. It is intended rather, to acquaint the student with general procedures and cautions to be observed when presented with general factual claims.

Objectives

1. Given examples of specific factual claims, inference general factual claims, and summation general factual claims, the student will be able to discriminate among them.

2. Given examples of inference general claims, the student will identify the population and recommend an adequate sample.

3. Given statements which contain either general or specific claims which are inferences, the student will be able to identify the inferences and the assumptions upon which the inferences might be based.

4. When asked to criticize recommendations which are based on the claim that two or more variables are related, the student will state some such caution as, "We need to remember that correlation does not prove causation." The student will also demonstrate such cautions in discussions, but will not use it as a blanket excuse for dismissing all correlational arguments.

5. When asked to criticize such statements as "Harry is conservative because he is a Republican", or "The Republican Party is conservative because most of the Republicans I know are conservative", the student will state some such caution as "It cannot be assumed that what is true of a group will be true of each member in the group" or "It cannot be assumed that what is true of the individuals making up the group is true of the group as a whole". The student will also refrain from making such assumptions during discussions.

Teaching Suggestions

1. (It is intended that, among other things, the first teaching suggestion will reaffirm for the student that verifying general claims is relevant to public controversy.) Ask the students, "What kind of factual claims occur most often in discussions of public controversy? That is, would you expect general factual claims to occur more often than specific factual claims, or would you expect specific factual claims to occur more often than general factual claims?"

    a. When students respond to the above question, ask them to explain their responses.

    b. If, when students attempt to explain their responses, they appear unable to distinguish between specific and general claims, ask other students to review the meaning of the terms and have them give examples.

    c. After the students have had an opportunity to discuss the question of the frequency of specific and general factual claims, indicate to the class that it is the opinion of the instructor that general factual claims occur more frequently in public controversy than do specific factual claims. Indicate, however, that the instructor might be mistaken. As an overnight assignment, ask one or two students to check on the accuracy of the instructor's opinion by counting the number of

2. After indicating, through the above teaching suggestion, that general factual claims are relevant to public controversy, ask the students, "Which would generally be more complex, the verification of specific claims or the verification of general claims?"

    a. When students respond to the above question, ask them to explain their responses.

    b. If the students have not done so, indicate that the verification of general factual claims is usually more complex than the verification of specific claims because a general claim often cannot be verified unless the more specific claims upon which it is based are verified. Use a statement such as "Senator Hicks usually votes against civil rights legislation" to illustrate how a general factual claim is based on underlying specific factual claims.

3. Caution the students against confusing complexity of verification with difficulty of verification, and caution them against believing that any general factual claim is more difficult to verify than any specific factual claim. The verification of the general factual claim "Senator Hicks usually votes against civil rights" might be complex (requires the verification of several specific factual claims) but might not be very difficult. The verification of the specific factual claim "Senator Hicks dislikes Floyd McKissick" might be more difficult than verifying the general factual claim "Senator Hicks usually votes against civil rights legislation".

4. Ask the students, "Which would be more complex, the verification of summation general claims or the verification of inference general claims?"

    a. When students respond to the above question, ask them to explain their responses and ask them to give examples.

    b. If, in responding to the above questions, students appear to be unable to distinguish between summation and inference general claims, ask other students to review the meanings of the terms and have them give examples.

    c. It is possible that none of the students will be able to distinguish between summation general claims and inference general claims, and it is likely that a majority of the students will have no more than a sketchy understanding of the processes and cautions which must be observed in verifying inference general claims. Therefore, tell the class, "The verification of inference general claims is more complex than the verification of summation claims. In order to understand why this is so, we need to understand the meaning of three terms: 'inference', 'assumption', and 'sample'."

        1) Show the class the top section of a transparency upon which appears the terms "Assumption, Sample, Inference."

            a) Point out to the class that they are not entirely unfamiliar with these three terms. They've been used occasionally in class, and they are used from time to time in ordinary conversation. However, like many other words, their meanings in ordinary conversation may not be exactly the same as the meanings we have chosen to give them in class.

b) Ask various class members what they mean when they use these words, or what they think other people mean when they use them. (The second clause in the preceding sentence anticipates that some students will claim that they never use these terms.) Encourage the class to give examples, synonyms, or essential characteristics when responding to the above question.

c) Ask the students how "assumptions" and "inferences" are involved when one uses a "sample". For instance: "When a person bases a conclusion on a sample, rather than a population, what assumption is he making? If a person surveyed a nationwide sample of voters and found that most of the people in the sample were Democrats, what inference might he draw about population of voters?"

2) Tell the class that placing a word in context sometimes helps to clarify its meaning. Show the class the next section of the transparency upon which appears: "When we know something about a *sample* we frequently draw the *inference* that the same thing is true of the population. In doing so, we assume that the *sample* is similar to the population".

3) Show the students the next section of the transparency, read it to them, and ask them to identify a population, a sample, an assumption that is being made, and an inference: "Senator Owens just returned from a tour of South Vietnam. While there, he talked to several highranking officials in the South Vietnamese government and armed forces. He also met several village chiefs and local pacification team leaders. Senator Owens reports that the people of South Vietnam welcome the United States as a friend and ally." (Acceptable answers to the above question include:

Population: The people of South Vietnam.

Sample: Several high ranking officials in the South Vietnamese government and several village chiefs and local pacification team leaders

Assumptions: The sample is similar to the population. The people he talked to were expressing their true feelings.

Inference: The people of South Vietnam welcome the United States as a friend and ally.

4) Tell the class that we have used the term "inference" in context several times and are ready to develop a definition.

a) Read from a transparency the following definition: "An inference is a conclusion that goes beyond the evidence upon which it is based."

b) Remind the students that inference general claims are based on samples, and ask the students to explain how one goes beyond the evidence when he bases a conclusion on a sample. (The evidence is limited to the sample, but the inference goes beyond the sample and says something about the population.)

c) Point out that the above does not mean that the conclusion is invalid.

d) Ask the class whether specific claims are ever based on an inference. (Specific claims are frequently based on something other than observation. When Dr. Sam Shepherd was found guilty of murdering his wife--first trial--the evidence was circumstantial. Although no one could be found who observed Mrs. Shepherd's death, the jury inferred from the circumstantial evidence that Dr. Shepherd killed Mrs. Shepherd at such and such a time in such and such a place.)

5) Point out that not all general factual claims which are based on samples are valid. Refer to the example of Senator Owens, and ask the class, "What questions would you want to ask to determine whether the Senator based his conclusion on an adequate sample?"

a) After the students have explored the above question, inform them that there are two basic questions which should be asked about samples: Was the sample large enough? Was either random or representative sampling used in order to select a sample which was similar to the population?

b) Ask the students how large a sample Senator Owens would need, and whether one man could interview a large enough sample while on a one to two week inspection tour.

c) Ask the class what a random sample is. (It is possible that no student will know the answer. If not, this lack of knowledge can serve as a transition to the definition.) Define a random sample as one in which each member of the population has an equal chance of being chosen. Ask the students to explain some of the difficulties which Senator Owens would have in selecting a random sample. (It would be difficult to obtain a list of the names of all South Vietnamese. It would be difficult to travel to all parts of the country in order to interview a random sample. It would be difficult to find a convenient time for each person to be interviewed.)

d) Ask the class what a representative sample is. Define a representative sample as one in which a deliberate attempt is made to include cases from all the important groups in the population. Ask the class what types of groups should be included for a representative sampling. (Religious, political, ethnic, social strata, economic, geographic, age level, etc.) (If the students find it difficult to identify groups in the above example, the teacher can select an issue of concern in the high school--such as desirability of interscholastic sports, or allowing students to drive cars to school--and ask the students what groups should be included for a representative sample--girls and boys, those who participate in sports and those who don't, car owners and non-car owners, etc.)

6) Remind the students that not all inferences are based on samples. (We have pointed out that specific claims are sometimes inferences.) All inferences, however, involve assumptions. We should learn to challenge important assumptions.

   a) Tell the students that the following is an example of an inference which is based on an assumption: "I could tell that he was a communist when he donated blood for the Viet Cong". Ask the students to identify the inference (. . .he's a communist) and the assumption upon which the inference is based. (Only a communist would donate blood to the Viet Cong.) (*Other examples:* "I knew he was a coward when he burned his draft card". "I could tell by his southern accent that he was a bigot". "I knew that he was courageous when he burned his draft card".)

   b) Tell the class that someone once pointed out that the salaries of Presbyterian ministers in Massachusetts and the price of rum in Havana tended to go up and down together. Ask them, "What mistake would a person be making if he concluded that the salaries of Presbyterian ministers in Massachusetts should be lowered because the price of rum was too high?" (He would be assuming that because two things occur together, one is the cause of the other.) "What mistake might a person be making if he claimed that Democrats have been in office during most of the wars in this century and therefore we should vote for Republicans?" (The same.)

   c) Ask the class, "What mistake would a person be making if he said that political parties have little power because they are made up of common individuals, and most of these individuals have little power?" (It cannot be assumed that what is true of the individuals making up a group is true of the group as a whole.)

   d) Ask the students, "What mistake would a person be making if he said that since the Republican Party is more conservative than the Democratic Party, Mayor Lindsay, who is a Republican, is more conservative than Governor Rampton, who is a Democrat?" (It cannot be assumed that what is true of a group will be true of each individual in the group.)

   e) Point out to the students that these are assumptions that commonly lead to incorrect inferences. Show a transparency reviewing three commonly mistaken assumptions:

      1. If two things occur together (are correlated), one caused the other.

2. What is true of an individual within a group is true of the group as a whole.

3. What is true of a group is also true of each individual.

7) Remind the class that the original question was, "Which is more complex, the verification of inference general claims or the verification of summation general claims?" Tell the class that we have seen that the verification of inference general claims is complex because of the problems of sampling and examining assumptions, and that we will now consider the verification of summation general claims.

   a) Tell the class that during a criminal trial, a newspaperman walked into the courtroom, counted the jury, and later reported "Four of the twelve jurors in the Helmsman case were Negro". Ask the class whether the reporter's statement is a specific claim, a summation general claim, or an inference general claim.

   b) After the reporter's statement has been identified as a summation general claim, ask the class how such claims are verified. If the students have a hard time answering the question, ask them if the statement is based on a sample of the twelve jurors or on the population of 12 jurors.

   c) Explain that the verification of summation claims requires two steps: 1) The underlying specific claims must be verified (e.g., Juror number one is a caucasian. Juror number two is a negro.) and 2) The specific factual claims must be correctly summed or added (there are four negroes and eight caucasians on the jury).

5. Tell the students that we have gone into quite a bit of detail concerning the verification of general factual claims. We frequently, however, do not personally verify each important factual claim that we encounter. That is, we frequently rely on the verification which has been made by an authority. In doing so we should remember that the qualifications of authorities making general claims must be examined using some of the same questions as those used for observers and reports of specific claims, as well as by asking questions about sampling and assumptions. A transparency containing the important ideas of the bundle might be used as a summary and review.

BUNDLE 25: CONCEPT IV. B. 7.

Note on Purpose

The idea of proof by analogy is presented here because argument by analogy is frequently used as proof for factual claims. Many people argue that analogy is an inadequate means of proof, because no two situations are ever the same.

Yet, in the area of public issues there is often no better source of proof available. So students should be aware of proof by analogy, and of the questions to ask in challenging analogies.

This lesson also lays a foundation for a less frequently recognized use of analogy which will be presented in Section IV. There the idea of using analogous, but contrasting, cases to clarify value conflicts is presented.

Objectives

1. Given an analogous case, the students will be able to: (a) state the analogy, (b) state similarities or differences between the analogous situations, and (c) decide whether the similarities or differences are important, and (d) offer a reasonable defense of that decision.

2. During discussions of public issues, the student will recognize analogies and will evaluate them using the criteria in teaching suggestion number 4.

Teaching Suggestions

1. Tell the students,"It has been claimed by officials in our federal government that if the United States had not intervened in Vietnam, the North Vietnamese would have defeated the South Vietnamese and then would have attacked other neighboring countries. Is this a reasonable claim? What evidence could be given either for the claim or against it?"

2. It is expected that when students answer the above question at least some of their responses will use analogies. (Germany was not stopped from moving into the Rhineland in 1936 and went on to attack Czechoslovakia in 1936. Italy was not stopped when she attacked Abyssinia in 1936, and she joined Germany as one of the Axis powers. On the other hand, the United States was very aggressive in taking territory from the Indians and from Mexico, but eventually her drive for more territory abated. One can point to Czechoslovakia: Like North Vietnam, she became Communist, but is now liberalizing. If France and then the U.S. had not intervened, Vietnam would have been spared a lot of bloodshed and might even have been less radically communist than it is now.) Keep track of any analogous situations the students give, and, if necessary, give some of your own.

3. Point out to the students that analogies have been offered to support and to oppose the claim that North Vietnam would have attacked other neighbors if the U.S. had not intervened. Select a student who has given an analogy, and offer a counter analogy. Point out explicitly that we now have at least two opposing analogies, and ask the student, "How can we determine which analogy is better? What questions can we ask to determine the goodness of an analogy?"

4. After several students had had a chance to respond to the above question, show a transparency that asks these questions that are important in evaluating analogies: (1) In what way are the situations similar and different? (2) Are the differences important? (3) Are the similarities important to the point the analogy is supposed to prove?

5. Show a transparency that contains a factual claim accompanied by a supporting analogy and an opposing analogy. Have the students use the questions in suggestion number 4 to discuss the validity of the analogies.

6. Tell the class that using analogies to prove a factual claim is generally frowned on. The similarities between the situations being compared are often so loose that predictions based on analogies are frequently erroneous.

7. For homework have the students apply the concepts of this bundle in analyzing an analogy made by Thomas J. Dodd* in which he justifies the U.S. involvement in Vietnam by comparing the Vietnam situation with the situation just before the Chamberlain-Hitler Munich agreement. The students might be required to make written responses to specific questions concerning the adequacy of the analogy. A good follow-up activity would be to have some students present their evaluations of the analogy to the class and defend them.

BUNDLE 26: CONCEPT IV. B. 8.

Note on Purpose

The teaching suggestions utilize the following five-point "Probability Rating Scale":

true beyond reasonable doubt	probably true	can't tell	probably false	false beyond reasonable doubt

An inflexible adherance to this scale is not intended. Some teachers might find that the discriminations made by a five-point scale are too gross. They may thus want to make a seven-point scale by adding "possibly true" and possibly false" to either side of "can't tell".

Omission of definitions of the five points on the scale was deliberate. It is expected that leaving the category width vague (to be worked out by the students as they defend their positions) will foster greater flexibility in using the scale.

Notice that this is the end product in the verification process. All of the other concepts in the factual dispute section should be applied in using the probability scale.

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*Excerpts from Thomas J. Dodd, "The New Isolationism", in Marcus Raskin and Bernard B. Fall (editors) *The Vietnam Reader*, pp. 174-175.

Objectives

1. Given a factual claim, the student will be able to rate it on the "Probability Rating Scale" and give a plausible explanation for his rating.

2. The frequency of dogmatic truth claims will decrease in student discussions, and the frequency of probability truth claims will increase.

Teaching Suggestions

1. Draw the following probability scale on the chalkboard:

true beyond reasonable doubt	probably true	can't tell	probably false	false beyond reasonable doubt

2. Tell the students, "When we are confronted with factual claims about public issues we make judgments about those claims. The evidence for all claims, however, is not equally convincing. Some claims seem to be clearly true or clearly false. The evidence for other claims is not conclusive and we say that they are probably true or probably false. At times, the evidence is so inconclusive, conflicting, or lacking that we can't tell whether the claim is even probably true or probably false."

3. Give the students practice in using the probability scale by having them respond to examples such as the following:

    a. Hold a chalkboard eraser in your right hand and say, "Is the statement, 'I am holding an eraser in my right hand', true beyond reasonable doubt, probably true, can't tell, probably false, or false beyond reasonable doubt. Although it is possible for the class to be suffering a mass hallucination, it is very unlikely.)

    b. Ask the students, "How would you rate the statement, 'The length of women's skirts will not change for the next twelve months'?" (This statement is probably false, because fashion designers generally change the hemline from year to year. It is not false beyond reasonable doubt, however, because designers might decide to concentrate on the neckline and leave the hemline alone.)

4. Conduct the following activity to give the students some practice in using the probability scale.

    a. Divide the class into groups of five and give each group a number.

    b. Pass out sheets containing some brief (one sentence) factual claims. Instruct the students to discuss the claims in their groups and rate them using the probability scale. The groups should be prepared to give an explanation of why they rated the claims as they did.

    c. Give the students 10 to 15 minutes to complete the assignment.

d. Reassemble in the large group and use the following procedure to discuss each of the claims which the small groups have rated:

   1) Have one person in each group report the rating his group gave the claim being discussed.

   2) Indicate each group's rating of the claim by writing the group's number in the appropriate place on the probability scale which was drawn on the chalkboard.

   3) Probe the students to examine the adequacy of the ratings which they gave each claim.

      a) Keep in mind that students will quite properly differ in the ratings which they gave some claims. For instance, if a student has very little information by which to judge a claim he might rate it "can't tell". Another student who is well informed on the same topic might give the same claim a more definitive rating.

      b) When students seem to strongly disagree on the ratings, ask them to explain what they mean by the rating they give. The differences might be definitional disputes.

5. Summarize the lesson.

6. Homework: Have the students read two articles on the editorial page of a newspaper and select two factual claims from each article. For each claim they are to write a brief note explaining how they would rate the probability of the claim, and explain some of the difficulties involved in rating the claim. Tell the students that the reason for the assignment is to forcefully bring to their attention some of the problems in rating the validity of factual claims which appear in common reading material.

BUNDLE 27: CONCEPTS IV. C. 1. a. 1. and b. through d.

Note on Purpose

The teaching suggestions in this bundle are intended to give the student background prerequisite to learning how to handle appeals to value and value disputes.

Although this bundle focuses primarily on Concepts IV. C. 1., Concept IV. C. 2. is also touched upon. This is necessary in order to justify the need to clarify and choose between value commitments (Concept IV. C.).

Objectives

1. The student will be able to define "value" and "moral values".
2. The student will be able to suggest moral values that are considered to be basic rights of man.
3. The student will be able to suggest moral values that are relevant to public issues, but would not be considered basic rights.
4. The student will be able to identify the value or values that support his political-ethical decisions.

Teaching Suggestions

1. As a transitional statement, tell the class that we have used the word "values" since the first lesson of the year, that we have previously mentioned value disputes as one of the three types of disputes which are relevant to public issues, and that we are now ready to explore this topic in greater detail.
2. Show a transparency giving the general definition of "values" and the definitions of "moral values" and "esthetic values", and read it to the class. Give them time to take notes. Tell the students that we will focus on esthetic values in a day or so.
3. Discuss the definition of "values" and "moral values" with the class. Tell the students that there are a number of different types of values, but that public issues are generally debated in terms of moral values.
4. Conduct a socratic discussion based on the article "Boost and Cheer the Winner, Lombardi Tells Writers", in John Mooney, "Sports Mirror", *Salt Lake Tribune,* August 3, 1968.*
5. Shift the focus from the content of the socratic discussion to the analytic concepts (Concepts IV. C. 1. b. - e.) by saying something similar to:

   "The discussion which we have just had was deliberately planned to include a number of value disputes. Remember that a value dispute is a disagreement over the importance of a value. Usually, such disputes occur when one person believes that a particular value should be emphasized and someone else believes that a different value is more important. What are some of the values that were emphasized by those of us who agreed with Mr. Lombardi's position? And what are some of the values that were emphasized by those of us who disagreed with Mr. Lombardi's position?"

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*For a discussion of socratic teaching, see Oliver, Donald W., and Shaver, James P. *Teaching Public Issues in the High School.* Boston: Houghton Mifflin Company, 1966, pp. 287-288.

a. On the blackboard, make two lists of values corresponding to the above two questions.

For example:

For Lombardi	*Against Lombardi*
1. Winning	1. Compromise
2. Courage	2. Compassion
3. Determination	3. Empathy
4. Hard work	4. Opportunity

b. Ask the students a question similar to: "How were these values used during the discussion? Or, what purpose is served by appealing to values? Or, why would a person mention values during a discussion of public issues?"

(They are used to justify our ethical decisions.)

Note to the Teacher: It might be necessary to approach the above point directly. If so, remind the students that values are our standards of worth. When we decide that an action is right or wrong we do so because we believe that that action is either in harmony with, or opposed to, some of the values that we think are important. When trying to convince someone that a course of action is morally right or wrong, we present arguments that either openly appeal to important values or assume those values. For instance, when a person says that he is against our fighting in Vietnam because victory there is not worth the cost in human life, he is openly appealing to a value. The same person, of course, might appeal to the same value covertly by simply claiming that if the war in Vietnam continues, hundreds of thousands of people will be killed. Whether we state our values overtly or covertly, our political-ethical decisions are based on value commitments, and our attempts to persuade others are based on appeals to values.

c. Refer to the list of values on the chalkboard, and ask students to give examples of how values in the two lists sometimes conflict so that a course of action that supports one value violates another value.

(Some such examples should have become evident during the discussion in Teaching Suggestion #1. As an additional example it might be pointed out that if the Allies in WW II had not emphasized winning, courage, determination, and hard work, Hitler might never have been defeated. On the other hand, a lot of people were killed, which violated the value of human life, and men learned to hate each other, which violated compassion.)

Note to the teacher: It might be necessary to extend this teaching exercise. Of course, you will have to decide how much time needs to be spent practicing recognizing and stating value conflicts.

6. Tell the students that because values can be found to justify opposing courses of action, clarifying and choosing between value commitments is a major problem in political-ethical analysis. In order to choose between

value commitments we need to be able to distinguish between some of the different types of moral values. For instance, although people differ on the values which they tend to emphasize, most people do not believe that all moral values are equally important; a person generally has some values which are very important to him, other values which have only minor importance, and values of various shades of importance in between.

a. Tell the class that one category of values, sometimes called "basic rights of man", is central to public controversy because public policy is most often defended in terms of these basic rights. Write the title "Basic Rights of Men" across the top of a blank transparency or on the chalkboard and ask the students to name rights which they think should be on the list. If the students have difficulty in offering adequate suggestions, ask them questions such as: "What are some of the rights which are listed in our Constitution and in the Declaration of Independence?" "What are some of the rights that people in a democracy believe that they have and which other people sometimes lack?"

(When this exercise is finished, the list should contain entries such as:

The Right to Life
The Right to Liberty
The Right to Property
The Right to Due Process of Law
Freedom of Speech and of the Press
Freedom of Religion
Equality of Opportunity
The Right to Peaceable Assembly
The Right to be Secure
    The Right to be Secure in Our Persons and Possessions, including the Right to Privacy
    The Right of Society to Peace and Order
Freedom from Hunger and Disease, and the Right to a Mimimal Level of Sustenance
Right to a Basic Education
Freedom of Movement: The Right to Live or Travel Where One Wants
Suffrage

This list is not intended to exhaustive. Students might have supportable reasons for adding to, or deleting from, the list. The teacher should also recognize that because of different backgrounds and frames of reference students will differ on the stress they place on these values. The basic criteria for making up the list were that these values are generally held in our society and that they are used to support or oppose public policy decisions. (It should also be noted that the list is somewhat redundant, such as in including both the right to life and the right to minimal sustenance.)

b. Tell the class that some values which are not generally considered to be basic rights of men are still relevant to public controversy. Ask the class to suggest values which would fit into this category and construct a list on the chalkboard or on a transparency.

(This list could include any of a large number of values which are not considered to be basic rights or freedoms, but which are still relevant to public controversy. The following list might help the teacher get the discussion going.

Patriotism or national honor--frequently used to support the argument that we should have taken stronger action when the North Koreans captured the Pueblo.

Integrity--relevant to a discussion of who should be nominated for public office.

Family responsibility--relevant to a discussion of the role of public welfare programs.

Safety--relevant to a discussion of the government's responsibility in constructing highways.

Cleanliness--relevant to a discussion of how a city should dispose of its garbage.

c. Remind the students that nearly everyone's values cover a wide range of importance. A person generally has some values that are very important to him, other values which have only minor importance, and values of various shades of importance in between. Most of us would consider the values which are on our list of basic rights of man to be very important. At the other extreme are values which we sometimes refer to as personal preference.

We discussed personal preferences earlier in the year when we tried to distinguish between public and private decisions. At that time we held that our personal preferences, such as the color we paint our house or the type of food we eat, are private matters. We should remember, however, that even personal preferences can be relevant to public issues. For example, Americans ordinarily consider yard care to be a matter of personal preference. Some cities, however, require homeowners to keep their grass trimmed and their yards looking neat. It they don't, the city does the work and bills the homeowner. This is usually done in the name of some other value such as majority rule.

7. Remind the students that Vince Lombardi believes in values such as: Winning, courage, determination, and hard work.

a. Ask the class whether this means that Mr. Lombardi does not believe in compassion, compromise, and empathy.

(Of course not. There are probably numerous situations in which Mr. Lombardi would be moved to compassion. There are probably numerous people with whom he can empathize. There are likely dozens of goals which are so important to him that he is willing to compromise in order to reach them.)

b. Some people tend to emphasize compassion, compromise, and empathy more than they emphasize determination, courage, winning, and hard work. Does that mean that they don't believe in these values?

c. Emphasize that when a person opposes a value it does not mean that he is completely opposed to it, nor does opposing a value in one situation completely destroy the value; that same value will be supported in another situation.

8. Homework: Newspaper and magazine articles are readily accessible sources of examples of appeals to values in supporting political-ethical decisions. The teacher may want to have copies made of applicable articles or he may want the students to find their own. In either case, the students are to find examples of statements in articles that concern a basic right of man and in which values are used to support a political-ethical decision.

BUNDLE 28: CONCEPT IV. C. 1. a.

Note on Purpose

Although public issues are generally construed in terms of moral values, other types of values are also occasionally involved. It seems doubtful, however, that a detailed discussion of axiology would appreciably increase the students' ability to analyze controversy. This bundle is a compromise between discussing only moral values on the one hand and engaging in a major complex analysis of types of values on the other.

Objectives

Given a mixed list of esthetic and moral values, the student will be able to identify the esthetic values and the moral values.

Given a case in which a public policy is argued in terms of esthetic values (for instance, the location and design of a freeway), the student will shift to relevant moral values (the general welfare, majority rule, economic growth, highway safety, etc.) rather than arguing only in terms of esthetic values.

Teaching Suggestions

1. Using a transparency, review the definitions of "values", "moral values", and "esthetic values" (they were given in the previous bundle). Tell the students that this bundle will focus primarily on "esthetic values".

   a. The following points should be stressed: (1) Use of the word "values" is not limited to moral values. Values which are relevant to questions of morality are only one type of values. (2) Political-ethical disputes are generally argued in terms of moral values. (3) Public policy, however, is sometimes influenced by concepts of beauty--for instance, conservation of natural resources, highway design, urban renewal, and public support for cultural programs.

b. Point out that when we define "esthetic values" as "standards for judging beauty", we are using the word "beauty" in a broad sense. We are not restricting that term to the narrow sense of visual beauty or feminine beauty, but rather mean to include such ideas as attractiveness or enjoyability of all sorts of things from masculine attractiveness to a coyote's howl.

c. Tell the class: "People are interested in beauty in several different areas: painting, photography, sculpture, architecture, music, literature, clothing, industrial and consumer design, people, nature and many others. The term 'esthetics' refers to questions of beauty in any of these areas".

2. Use the following exercises, or similar ones, to help the students associate the word "esthetics" with questions of beauty.

   a. Show some transparencies or pictures of models fashioning different types of clothing.

      1) Ask questions which focus on reactions to the clothing, such as:

         a) "Do you like this dress? Is it esthetically appealing to you?"

         b) "Why do/don't you like it? What sort of esthetic values do you use in judging the attractiveness of clothing?" (Call on a number of students so that differences in taste will be apparent.)

      2) Ask questions which focus on reactions to the models.

         a) "Which of the girls is most esthetically appealing? That is, which one is the most attractive?"

         b) "What values or esthetic standards do you use in judging feminine beauty? What is it that makes some girls prettier than others?" (Some people prefer blondes, or wide-set eyes, or an angular jaw, etc.)

      3) Ask questions which focus on reactions to the total photography rather than on the clothing or on the model.

         a) "If you could decorate a room with these photographs, which ones would you choose, considering the total photograph, rather than just the girl or her clothing?"

         b) "What is there about each photograph that you do/do not find esthetically pleasing?" (Draw the students' attention to such details as composition, balance, lighting, color coordination, etc.)

b. Show a variety of paintings, photographs, sculptures, etc. Ask the students which are esthetically appealing to them. Encourage them to verbalize the esthetic values that they are appealing to in making their judgments.

c. Play a tape recording, containing several types of music (popular, classical, jazz, and modern serious) and encourage the students to explain which esthetic values are supported or violated in each case. (Some people like a big beat, others prefer variations on a theme, etc.) NOTE: Follow a procedure similar to the one used in suggestions a. and b.

3. Tell the students that moral values sometimes influence esthetic judgments, and that esthetic values sometimes influence ethical decisions. To illustrate:

   a. Ask,"Why do many politicians watch their weight carefully, wear expensive clothes, and keep their shoes polished? Why is an attractive wife an asset to a politician? (The political-ethical question "Who should I vote for?" is sometimes influenced by esthetic values such as the personal attractiveness of the candidate. Students probably have had some experience with this in school elections.)

   b. Show a transparency or picture of a model in a mini-dress and ask, "Why *might* some very religious person find this picture unattractive?"

      (One person might say that he does not like this picture because it represents fast living and modern youth who violate religious standards which he holds dear. In other words, this person's moral values influenced his esthetic judgment.)

   c. Show some pictures or reproductions of classic paintings that have a religious theme, such as some of the works of Michelangelo and ask whether such paintings should be used to decorate the interior walls of the school.

      1) Select several students who are opposed to this proposition and have them explain their objections.

         a) If some students say something such as, "It would be a violation of the separation of church and state", point out that they are using a moral value to support a political-ethical decision.

         b) If a student says that he doesn't like that sort of painting, point out that he is using an esthetic value to support a political-ethical decision. Then ask him whether decisions about the school should be decided by his personal taste. If this line of questioning is pursued far enough, the student should take a position that very few students would like the picture. At that point, explain to the student that he is now using a moral value to support his decision. The moral value is that the desire of the majority should not be ignored when public decisions are made.

Note to the teacher: The main point of the bundle is that we tend to move to moral values to support political-ethical decisions even though we begin with an esthetic value.

2) Tell the class that although public policy decisions are often supported or opposed in terms of esthetic values, there is usually an assumed moral value which is influencing the decision. These assumed moral values should be explicitly stated and examined.

4. Review the distinction between esthetic values and moral values by asking questions such as:

   a. "When a person claims that folk songs are the greatest of all forms of music, is he making an esthetic judgment or a moral judgment?"

      (We generally take such a statement to be an esthetic judgment, although the person making it might be doing so on moral grounds. For instance, he might base his judgment of folk music on the belief that people who listen to it are inspired to live better lives.)

   b. "If a person claims that all young men should volunteer to serve their country in some military capacity, is he making an esthetic judgment or a moral judgment?"

      (We generally take this to be a moral judgment, based on patriotism as a moral value.)

5. Homework: A popular negro slogan is "Black is Beautiful." The students are to write a two or three paragraph explanation of the extent to which the slogan is related to esthetic and/or moral values.

BUNDLE 29: CONCEPT IV. C. 2. a.

Note on Purpose

People frequently--perhaps most frequently--argue public issues in terms of what they consider to be "the facts". For instance, in discussing whether to pass open housing legislation, the following factual questions might be relevant: Have minority groups been discriminated against in housing in the past or present? Will open housing legislation result in greater mixture of races in housing areas? Will integrated housing lessen or increase racial tension?

Although examination of relevant facts--past, present, and future--is essential to a rational discussion of public issues, it should be noted that people can agree on the facts and still disagree on the goodness of the proposed policy. Using the above example, various people might agree that racial minorities have been, and are being, discriminated against in housing. They might also agree that open housing legislation will result in racially integrated neighborhoods, and that the overall result will be a reduction in racial tension even to the point that race will be ignored in such sensitive areas as dating and marriage. It is not hard to imagine, however, that agreement on all of these factual claims would still leave disagreement on the goodness of open housing legislation. If one person values racial mixture in marriage, and another person values racial purity in marriage, essential disagreement over the proposed policy would not be resolved by examining the facts alone.

This bundle, therefore, has two purposes: (1) to help students understand that political-ethical disputes sometimes cannot be resolved by examining only factual claims, and (2) in conjunction with other bundles, to broaden the strategies which students employ in resolving public issues.

Objectives

During discussions of public policy, students will not rely entirely on factual claims, but will explicitly state the values upon which their arguments are based and will attempt to reach agreement concerning the importance of values relevant to the discussion. (It is not expected that his objective will be reached by this bundle alone.)

Teaching Suggestions

1. In your own words, present to the students an explanation similar to that found in the "Note on Purpose" for this bundle.

2. Ask the students whether the above explanation was clear, and call on individuals to summarize the main point.

   (People can agree on the facts which are relevant to a public issue, yet disagree on the goodness of the proposed public policy. Their disagreement is based on a value dispute.)

3. Tell the students that we will now apply this idea to a political-ethical issue.

   a. Ask the class whether the principal of a school should have the right to search students' lockers without obtaining either a warrant or the consent of the students. Ask several members of the class to respond to the question and let them discuss it until their position or positions are fairly well stated.

      1) If students are opposed to summary search by school authorities, prod them into reconsidering their positions by asking questions such as:

         a) "Aren't the lockers the property of the school? Isn't it really rather silly for students to claim the rights of privacy concerning public property?"

         b) "Suppose that you were a member of the track team and there was going to be a track meet with a rival school that afternoon. You're the anchor man on the 440 relay team. Someone has stolen your track shoes for a practical joke. Your shoes are specially made to fit your feet. If they're not found, you won't be able to run as well as you usually do, your relay team might be denied a well deserved victory, and the track team might even lose the meet. Don't you think that the lockers in the school should be searched?"

c) "What if someone has stolen the money that was to be used to buy yearbooks? If the money is not recovered, there will be no yearbook for the school this year. Every part of the school has been searched except the students' lockers. Should everyone in the school have to suffer just to protect the rights of privacy of those people who do not want their lockers searched?"

d) "Suppose that a girl's purse has been stolen. The girl has serious heart trouble and must carry medicine with her at all times. She keeps the medicine in her purse. Shouldn't the lockers be searched? Is the right to privacy more important than this girl's life?"

2) If students favor summary search by school authorities, prod them into reconsidering their positions by asking questions such as:

a) "What if you kept love letters in your locker? Do you think that the principal has the right to go through your private things and read your letters?"

b) "What if you hated one of the teachers or a member of the administrative staff and you had something written in your locker that expressed your feelings in rather vivid language? Shouldn't your right to privacy protect you from having the principal find out what you've written?"

c) "Suppose a student is a member of a radical group--say the Black Panthers or the Minutemen--and the board of education has asked the principal to search the student's locker and see if it contains any radical literature. Don't people who hold radical ideas have the right to keep those ideas private if they so desire?"

d) "If the principal has the right to search students' lockers, does he also have the right to go through a teacher's desk? Doesn't anyone have privacy in the school?"

b. Remind the students that the main point of this bundle is that people might agree on the consequences of a proposed policy but disagree on the goodness of the consequences. The following references to the above discussion can be used to illustrate this point.

1) Ask the students, "In each of the situations that we just discussed, what would be the consequences of either searching the students' lockers or not searching the lockers?" For instance:

        a) "What might happen if the principal refused to search the lockers to find the girl's medicine or the boy's track shoes?"

        b) "What might happen if the principal searched the students' lockers and found the love letters or the radical literature?"

    2) Pick several of the above situations in which the students were in agreement concerning the consequences. For each of the situations have the class vote on whether the principal should search the lockers. After the vote has been taken, point out that for at least some of the situations the class agreed as to the probable consequences but disagreed as to the goodness of summary search.

    3) As an alternative to 2) above, stipulate the consequences and then have students vote on the policy, for instance:

        a) "Suppose that it is certain that the girl will die if the lockers are not searched immediately. Should the principal wait for a search warrant, or should he go ahead and order the search to be made?"

        b) "Suppose that if Marxist literature is found in the locker of a boy who is a member of the Black Panthers he will be expelled from school; should his locker be searched without his permission?"

        c) Point out to the students that even when we stipulate consequences, thereby assuring agreement on them, we have disagreements concerning what policy should be followed. Students will probably agree that it is good to search the lockers to save a girl's life, but they might disagree on whether it is good to search the lockers to uncover the students who belong to radical groups. If they fail to agree on the latter point, point out that many people in the country believe that a person does not lose his rights to privacy simply because he does not conform to majority opinions.

c. Make the point that we sometimes disagree concerning the goodness of a proposed policy because we have different frames of reference, including different needs and values. This can be done by asking the students questions such as:

    1) "Why might a principal disagree with his students concerning whether he should have the right to search lockers?"

    2) "Do any of the ideas that we've studied earlier in the year help explain why different students would disagree over whether lockers should be searched?"

4. Summarize the bundle.

BUNDLE 30: CONCEPTS IV. C. 2. b. c. 1) & 2)

Note on Purpose

The role of values in public controversy is frequently overlooked. Since the arguments of both students and mature adults generally focus on factual disputes, definitional disputes and value disputes are seldom explicitly recognized. Nevertheless, factual claims which are made in the context of disagreement over public policy nearly always appeal implicitly to values. For instance, a person who asks a question such as "Don't you know that smoking marijuana is illegal?" is sometimes not interested primarily in ascertaining a fact--whether the other person understands the law--but rather is implicitly appealing to an assumed value--respect for the law. Explicating these implicit value appeals will aid rational discussion. Since students are not accustomed to explicitly stating value claims or value conflicts, it is the purpose of this bundle to give students practice in recognizing and verbalizing value claims and types of value conflict. The particular value categories and value conflict categories which are presented in the bundle are not ends in themselves, but rather are intended to aid the student in analyzing value conflict.

Objectives

1. Given an argument which contains implicit value claims and value conflicts, the student will be able to verbalize the claims and conflicts.

2. Given a statement of public policy, the student will be able to name values which are supported by that policy and values which are contradicted.

3. During discussions, the student will state the values which he thinks are relevant to the dispute and indicate the degree to which the values are supported or contradicted by the positions of each party to the discussion.

Teaching Suggestions

1. To get into the next teaching suggestion, use a transitional statement similar to the following:

   "For the last day or two we have been focusing on value disputes. One reason that we want to learn how to handle value conflicts rationally is that such conflicts are common in our society. They occur in disputes between parents and children, school authorities and students, Republicans and Democrats, black men and white men, and even among nations. Let's take a look at a value conflict between a principal and some high school students."

2. Show a transparency of "Fire the Teacher", and read it to the class.

Fire the Teacher

Mr. Jefferds was the worst social studies teacher at Roseville High. He did not know his subject, seldom taught a lesson, frequently fell asleep at his desk, could not control his class, and his students generally did not do well on the college entrance exams.

A committee of students requested that the principal have Mr. Jefferds fired. They argued that people in a democracy have the right to help make decisions which are important to their basic welfare. The principal refused the request, claiming that the students were simply going to have to leave such decisions to the school authorities.

a. Ask the students:

   1) "Who is Mr. Jefferds"?

   2) "Is he directly involved in the value dispute?"

      (Mr. Jefferds is involved in the sense that the decision will affect him, but not in the sense of participating in the argument.)

   3) "Who are the two opposing parties in the value dispute?"

b. Write the names of the antagonists (the students and the principal) on the chalkboard, and ask the class:

   1) "What value did the students use to support their request?"

   2) "What value did the principal appeal to when he denied their request?"

c. Write "Right to representation" under "Students" on the chalkboard. Write "Respect for authority" under "Principal". Also write any other reasonable values which the students suggest.

d. Tell the students:

   "This is one type of value dispute. We'll give it a name in a minute. Let's first take a look at a second type of value conflict".

3. Show a transparency of "Restricted Parking", and read it to the class.

Restricted Parking

Dale stared at the parking ticket in his hand and angrily considered what to do about it. He had entered the university faculty parking lot at 9:00 p.m. to deliver test scores to the computer center. Because he wasn't a faculty member, he ordinarily would have parked in the special stalls for computer center customers; but since it was after 5:00 p.m., he simply pulled into the most convenient space. But why had he been given a ticket when it was clearly after hours?

Dale began to examine signs in the parking lot. The first one he came to read, *"NO PARKING WITHOUT PERMIT--24 HOURS A DAY"*. His first reaction was increased anger. "I didn't know that was the rule", he thought. "If I had known, I would have parked in the computer center stalls. Besides, it's a stupid rule! There's not another car in the entire area. I could understand them giving tickets if unauthorized cars crowded the lot and made it hard to find a place to park, but to ticket a car in an empty lot isn't fair. I have a good mind to tear this ticket up and throw it away".

Dale got into his car and started for home. He had cooled off, however, by the time he pulled into his driveway. "Well", he thought, "I did break the rule. Maybe I'll pay the ticket after all".

a. Write the name "Dale" on the chalkboard and ask the students:

    1) "What happened to Dale?"

    2) "What decision is he trying to make?"

    3) "What values would Dale support if he decided to pay the fine?"

    4) "What value would Dale support if he decided not to pay the fine?"

b. Write "laws should be reasonable vs. respect for the law" under "Dale", and tell the students that this seems to be the value conflict.

(The chalkboard should look similar to this:

Students vs. Principal		Dale	
right to represent	respect for authority	laws should be reasonable	respect for the law

4. Tell the class:

   "We've now considered two different types of value conflicts. Can you see any ways that they differ?"

5. When the students appear to understand that value conflicts can be between or among people, and within one person, write the following on the chalkboard:

VALUE CONFLICTS

1. Between or among people

2. Within a person

    a. Ask:

       "Why do value conflicts occur between or among people?"

b. Accept plausible answers and encourage students to explain their responses. It might be necessary to direct the students' thinking by asking a more specific question such as:

"Would any of the concepts that we've talked about in the last few months help to explain why value conflicts occur between people?"

c. Ask:

"Why do value conflicts occur within a person?"

(Most of us have learned a set of values which to some extent is contradictory. For instance, most of us value both freedom of speech and national security. Speaking out against the draft during a time of war might endanger our national security. On the other hand, suppressing dissent during war might have a chilling effect on freedom of speech during peacetime.)

d. Ask:

"If our values are to some extent contradictory, how might we explain the fact that value conflicts sometimes *do not* occur within an individual? For instance, a person might be in favor of free speech in a specific situation and for him there might be no internal value conflict".

(He might not be aware of inconsistent application of values from one situation to the next. Or, free speech might be an ultimate value for him so that it takes precedence over all other values. Or, he might be using a defense mechanism, such as compartmentalization, to avoid the discomfort of inconsistency.)

6. Refer to the categories which were written on the chalkboard and tell the class, "It is useful to classify value conflicts in this way, but there are also other categories that can be used.

   a. Show the transparency "Fire the Teacher" and re-read it to the class.

   b. Ask the students to restate the opposing values.

   c. Ask:

      1) "What do we mean by basic rights or basic values?"

      (Those that are essential to the dignity of man.)

      2) "Are these opposing values basic rights?"

      (Democratic participation is a basic right. Respect for authority is not usually considered a basic right of man. However, if the student can make a case for "respect for authority" as a basic value in our society, he should be encouraged to do so.)

d. Write "Basic values vs. Specific values" as #1 on the right hand side of the list of value conflicts on the chalkboard.

e. Say:

"Our first two types of value conflicts are classified according to the number of people involved. How is the third conflict classified?"

(According to the values involved.)

f. Add this information to the chalkboard so that it looks like this:

VALUE CONFLICTS

A. Who is involved?
  1. Between or among people
  2. Within a person

B. Types of values?
  1. Basic vs. Specific values.

7. Say:

"Let's look at another case involving value conflicts and see if we can identify the types of conflicts".

a. Show a transparency of "It's My Car", read it to the class, and ask the following questions:

It's My Car!

Jerry Gibson was called to the principal's office for breaking a rule forbidding students to drive their cars to school. Jerry argued that he did not park his car on school property. He parked on a public street which he had as much right to use as anyone else. Jerry also claimed that the rule was a denial of property rights, because he owned his car and had a right to control its use.

The principal argued that he, not Jerry, had the responsibility for establishing school rules and that if Jerry continued to drive his car he would be expelled. The principal also pointed out that the majority of students who receive tardy slips drove their cars to school. The rule was established to cut down on the number of students who were late each morning.

1) "What value was Jerry appealing to when he claimed that he had as much right as anyone to park on a public road?"

(Equality of opportunity.)

2) "What value was Jerry appealing to when he claimed that he had the right to control the use of his own car?"

(Property rights.)

3) "What value was the principal appealing to when he claimed that he had the right to run the school?"

(Respect for authority, or possibly, respect for orderly process.)

4) "What value was the principal appealing to when he said that the rule was established to cut down on tardiness?"

(Punctuality.)

b. Write the above four values on the chalkboard and ask:

"Which of these values are basic rights or basic values and which are not?"

c. Refer to the chalkboard--

VALUE CONFLICTS

A. Who is involved?	B. Types of values?
1. Between or among people	1. Basic vs. Specific values
2. Within a person	

Ask:

"Which of these types of value conflicts are represented in the case that we just read (*It's My Car*)?"

(Jerry vs. the principal is a conflict between persons. Equal treatment or property rights vs. punctuality is a conflict between basic rights and lesser values or specific values.)

d. Point to A. 2. on the chalkboard and ask, "Can you see a possible conflict within an individual in this case?"

(Jerry might value both driving his car to school and respecting the authority of the principal. The principal might value both Jerry's right to control his own car and the right of the school to control the behavior of students.)

e. "What value might the principal have been appealing to if he had claimed that the rule was intended to prevent students from driving recklessly on or about school property?"

(He might be appealing to safety, and ultimately to the importance of protecting human life.)

f. "If the principal were appealing to the importance of human life, and if Jerry were to maintain that he had the right to control the use of his own car, the value conflict would be Life vs. Property".

g. Write "Protection of life vs. Property rights" on the chalkboard and say:

"Can you see how this conflict differs from #b. 1. (Basic vs. Specific values)?"

(B. 1. is between a basic right and a specific value. Protection of life vs. Property rights is a conflict between two basic values.)

h. Write "Basic values vs. Basic values" as #b. 2. under VALUE CONFLICTS on the chalkboard.

i. Write "Specific values vs. Specific values" as #B. 3. and say:

"If Jerry claimed that he drove his car because it was more convenient than riding the bus, he would have been appealing to convenience. Convenience is not generally considered to be essential to the dignity of man. If the principal then argued that Jerry would get to school on time if he rode the bus, we would have a conflict between two values which are not considered basic rights or basic values. The conflict would be between convenience and punctuality.

The chalkboard should now look like:

VALUE CONFLICTS

A. Who is involved?	B. Types of values?
1. Between or among people	1. Basic vs. Specific values
2. Within a person	2. Basic vs. Basic values
	3. Specific vs. Specific values

j. Point out for the students that any of the three types of value conflicts on the right (Basic vs. Specific, Basic vs. Basic, and Specific vs. Specific) can occur within one person or between people.

8. Homework: Have the students answer the following questions for the article by Carl T. Rowan, "Party Must Sell Nixon to Negro", *Salt Lake Tribune*, August 9, 1968:

   a. In Mr. Rowan's article, is the value conflict between people or within a person?

   b. According to Mr. Rowan, which values are stressed by each side in this conflict?

   c. Are these basic or specific values?

   d. What is your opinion of Mr. Rowan's article? Did you like it? Was it well written? Do you think that his claims are true?

   e. Are there any indications that Mr. Rowan is biased?

   f. Would your opinion of the article change if you knew that Mr. Rowan was a negro? Tell why.

  g. How would Mr. Rowan's value judgments be influenced by his frame of reference?

  h. How might your value judgments about the article be influenced by your frame of reference?

9. A valuable review exercise would be to discuss the completed homework assignment in class. (In the discussion of question f it would be well to point out that Carl Rowan is a respected negro intellectual who has held responsible government positions such as head of the United States Information Agency.)

BUNDLE 31: CONCEPTS IV. C. 3. a. b. c.

Note on Purpose

The first concept in the *Outline of Concepts for the Analysis of Public Issues* is, "Making decisions about public issues is basically a matter of ethical analysis". Value conflict is central to ethical decisions, and the present bundle pulls together major ideas for resolving value conflict in public issues.

Objectives

Once a value conflict is identified, the student will suggest or use strategies for its resolution. Strategies suggested will include those covered in this bundle.

Teaching Suggestions

1. Hand out "Long Locked Lad Lands in Lock-Up,"* and hold a *brief* discussion of the case.

   Note to the teacher: This discussion is intended to produce a firm value dispute between the teacher and the students. This value dispute will then be used as a springboard into a presentation of rational ways of handling value conflict.

   a. Read the case to the class.

   b. Review the facts of the case, emphasizing that the boy's parents supported his wish to keep his hair long.

   c. Ask, "Should the school have the right to tell students how to wear their hair, or should such decisions be left to the student and his parents?"

Civil Liberties, January 1968

d. Call on several students to respond to the above question. If the student does not explicitly identify the value or values to which he is appealing, the teacher should identify them for him.

(The student might oppose the school and appeal to such values as the right of parents to make decisions for their children, or the right of persons to make decisions concerning personal preferences. They might even appeal to the right to dissent or be different. On the other hand, the student might support the school and appeal to authority or the right of governing bodies to make decisions concerning general welfare.)

e. Select a student who seems to be firmly committed to his position. Take the opposing position and state the dispute as a value conflict.

(If the student is opposed to the school, the teacher should support the school's action. The teacher might say something like, "The school authorities have the responsibility for making decisions concerning the students while they are in school, and no one, not even parents, has the right to disobey school rules. The authority of the school is far more important than the personal preferences of individual students or parents."

Do not switch positions and do not argue in terms of factual claims. Regardless of arguments given by the student, keep restating your value commitment so that the value conflict is apparent to the class.

2. Make a transitional statement similar to: "In the case we just discussed, I supported one value, or set of values, and some of you supported another. If we are to rationally deal with value disputes, we must be able to identify the values that are in conflict. At the first of the year, this was difficult. Have we progressed to the point that we can more easily identify value conflicts? Can you state the values that I supported and opposed to the values that some of you supported in the case?"

3. Write the conflicting values on the chalkboard, and say something like: "I was being deliberately stubborn because I wanted to get our discussion hung-up on the value dispute. Since we were getting nowhere, it might have appeared to some of you that value conflicts cannot be resolved. They can't,of course, if people have a greater commitment to being stubborn than they have to being rational. There are times, even when people are committed to being rational, when value commitments are so strong that neither person can be persuaded to change his position. We should not give up too quickly, however, because there are a number of ways of handling value conflict.

4. Hand out a sheet summarizing the various ways of handling value conflict presented in the part of the Outline covered by this bundle. Read it to the class, giving only a minimum of explanation.

5. Go back over the six points on "Handling Value Conflict", giving a more detailed explanation of what each point means and how it can be applied to the case that was discussed earlier.

a. Illustrate the relevance of frame of reference to value conflict by asking questions such as:

   1) "In the case that we discussed, the boy's family is from Great Britain. In that country, certain long hair styles are not only considered fashionable, but are a sign of conservative respectability. Although it was not mentioned in the case, the boy's father wore his hair much longer than is fashionable among older men in the United States. The boy was simply following his dad's example, who in turn was following the fashion of his native country. Given this information, what might the boy have said to the school authorities in order to get them to change their value commitment?"

   2) "Suppose that the school authorities in the case had known in advance that the boy's family was from Great Britain, and that it was the custom there for men to wear their hair long. What are some of the possible ways that they might have reacted to this information? In what ways might it have affected their decision to suspend the boy from school?"

   Note to the teacher: Both of the above sets of questions are intended to be open ended. The knowledge that their frames of reference differed might have had any number of different effects on the value commitments of either the school authorities or the boy and his family.

b. Illustrate the relevance of language to value conflict by asking questions such as:

   1) "Suppose that the boy and his father argued that school rules regulating hair styles violated the students' freedom of choice. How might the boy and his father define "freedom of choice" to make their value appeal as powerful as possible?"

   (They might claim that "freedom of choice" refers to a very broad area of behavior in which no one has the right to tell another how to behave. If it does not include choices as personal as the way a person dresses, it is largely an empty phrase.)

   2) "How might the school authorities define "freedom of choice" to weaken the value appeal made by the boy and his father?"

   (They might claim that complete freedom of choice is synonomous with anarchy. They could point out that although we hold a high regard for freedom of choice within reasonable limits, we do not value anarchy in our society.)

c. Illustrate the relevance of factual claims to value conflict by asking questions such as:

   1) "The school authorities might claim that if they let the boy wear long hair to school certain undesirable consequences would follow. What are some of the possible consequences that the school might find undesirable?

(If one boy is allowed to wear long hair, other students might want to do even more outlandish things. The boy in question cuts his hair about two inches above his shoulders, other boys might not want to cut their hair at all, some might not want to shave, others might refuse to take baths. Things could get so out of hand that the educational functions of the school were disrupted.)

2) "How might the boy and his father answer the above factual claims?"

(They could claim that the probability of such consequences is low. Or they might counter with a factual claim of their own; that the arguments given by the school authorities were a smoke screen to cover up their own middle class prejudice against long hair.)

d. Illustrate the relevance of appealing to a third higher value:

1) Ask the students to suppose that the school authorities and the boy and his father have been making a genuine effort to settle their differences rationally: They have made a fairly successful effort to understand each other's frame of reference; they have explored possible consequences of the school's policy and generally agree on what would happen if the boy is either allowed to come back to school with long hair or is forced to cut his hair. They still disagree, however, on the goodness of the school's policy; they have a genuine value conflict.

2) One way of resolving this conflict is for either side to think of a value that both sides agree is more important than either of the conflicting values to which they have appealed so far. Remind the students that they identified earlier a value conflict between the school authorities and the boy and his father. (The values in conflict were written on the chalkboard. Let's suppose that they were "the right of the school to make rules concerning student conduct versus the right of parents to make decisions concerning their children.) Ask the class:

a) "Are there any values which are related to this case and which are more important than the two conflicting values which we have written on the chalkboard?"

(The students might give any number of plausible answers. They might point out that the adults in this case are arguing about their rights while ignoring the boy's rights. Surely a teenager has some rights of self expression. He should be able to make some decisions concerning his own life. The class might also point out that there are educational values involved: As long as the boy is not allowed to go to school, his education is suffering; if his dress is extremely unusual, allowing him to continue might be detrimental to the education of his classmates; part of a public education is some training in American traditions, among which is the right to reasonable dissent on the one hand and respect for authority on the other.)

b) "If the opposing sides in this dispute agree on a higher value, they must then decide which policy will best support that value. Suppose that they agree that the student's right to self expression is more important than the adults' authority rights, would they make the boy cut his hair or let him wear it long?"

e. Illustrate the relevance of selecting alternate policies.

1) Tell the class that the school authorities and the boy and his father might solve their dispute by selecting a course of action that was satisfactory to everyone involved. For instance, the school authorities might agree that the policy on hair length violated the boy's right to dress as he pleased and the father's right to make decisions for his son. They might point out, however, that if they allow the boy to break the rule, the authority of the school would be weakened. They might then suggest that if the boy would cut his hair and return to school, they would change the rule on hair length the following month. The boy could then grow his hair back out to its original length. By following this course of action the authority of the school would not be directly challenged, and the boy would eventually be allowed to wear his hair the way he wanted.

2) Ask the students if they can think of any other policies that would support both of the values--the authority of the school and the rights of the boy and his father.

(Since the boy's parents have tried to enroll him in another school without success, another possibility would be for the school authorities to allow the boy to attend another school in the same school district. Or they might use their professional influence to get another district to accept the boy.)

f. Illustrate the relevance of using analogies:

1) Point out to the students that during the year analogies have been used several times by the teacher. Explain that analogies were used to force the students to examine their own value inconsistencies.

2) Ask the students if they can think of situations in which they would definitely support the right of the school to control dress standards.

(If students came to school naked, or if they wore their hair so long and dirty that vermin grew in it.)

3) Ask the students if they can think of situations in which they would definitely oppose the right of the school to control dress standards.

(If the school tried to make everyone wear a uniform. For instance, if the girls had to wear grey wool dresses that came to their ankles, and had a high neck and long sleeves.)

6. Review the bundle.

PART II

THE RESEARCH

CHAPTER TEN

THE CONTEXT FOR THE U.S.U. RESEARCH PROJECT

The comparison of one teaching method or style against another has not been a particularly fruitful strategy in educational research. Dubin and Taveggia (1968), after reviewing the teaching methods research at the college level, concluded that studies comparing teaching methods in terms of effects on final examination performance had not produced results indicating superiority of one method over another. A review of research published in 1962 and dealing specifically with the teaching of critical thinking (Shaver, 1962) produced conclusions that still appear valid: (1) that critical thinking skills are not likely to be learned as a by-product of the study of the usual social studies content, and (2) that research has not produced answers to questions about the relative effectiveness of different methods for carrying out the explicit instruction.

The report of the Harvard Project*, in laying out a justification for the project's research design, also reviewed the previous research in teaching for critical thinking, and concluded that the use of designs which simply test one method against another are not likely to be any more fruitful in the future than they have been in the past. The report then noted several studies (Wispe, 1951; Patton, 1955; Glaser, 1941; Stern, 1962; McKeachie, 1961) which indicated that a more fruitful course of research, in light of the common sense knowledge that different individuals respond differently to the same instructional setting, would be to attempt to identify student personality traits which might interact with different teaching styles to affect learning. In other words, it seemed reasonable to attempt to determine if different teaching methods would have systematically different effects on students with differing personality characteristics. This more complex view of learning as a basis for research seems to fit much better with our knowledge about human variability.

The Harvard Project, then, involved a research design within a research design. Despite the evidence to date that students taught critical thinking concepts would perform better on tests designed to measure those concepts than would students not given the special instruction, it was decided to compare students taught with the project's experimental materials against control groups who concurrently studied the regular social studies curriculum. As expected, on measures developed by the project based on its instructional objectives, the experimental students showed significantly greater gains than the control students, while on standardized tests not geared specifically to the project's goals, significant differences did not emerge. This comparison of experimental and control students constituted the first design.

The second design involved comparisons of students within the experimental treatment. These students were engaged in the discussion of cases presenting controversial issues with instructors using two different styles of teaching--

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*In the following discussion, each reference to the Harvard Project's research will not be documented. The reader interested in more detail should turn to the more extensive reports which are available (Oliver & Shaver, 1962, Part II; 1966, Appendix). Summaries of the project are also available (Shaver & Oliver, 1964a; 1964b).

recitation and socratic. With the first style, the teacher leads the students through an analysis of the case using a series of questions programmed to explore the different problems involved; the second is an adversarial style in which the student is forced to take and defend a position on the issue presented by the case. Statistical analyses indicated no differences on the project's measures of learning when students taught by the two styles were compared. However, in light of the earlier noted lack of fruitfulness of methods research, it had been decided to look at student personality- teaching style interactions as they might have affected learning.

A number of "personality" measures were administered. Three types of tests were used: measures of cognitive need and cognitive flexibility, measures of ideological commitment, and measures of temperamental or socio-emotional traits. Distributions of scores on these measures were broken into thirds and students classified according to the third of the distribution they were in and the style of teaching to which they were subjected. A two-way analysis of covariance (adjusting for pretest and intelligence scores) was then carried out for each combination of every personality and learning measure--ninety-one analyses in all.

Twelve interactions were significant at the .05 level (Shaver & Oliver, 1968), a greater number than expected by chance, but still a relatively meager yield. Table 1* indicates the measures which were involved in the significant interactions. No clear patterns emerged from the analysis, although it appeared that the more directly a test measured specific skills and content taught in the classroom, the less likely it was that it would be involved in personality-style interactions.

The above sketch of the Harvard Project's investigation of student personality-teaching style interactions indicates the problem with which the research of the U.S.U. Project was directly concerned--that is, lack of knowledge of the extent to which socratic and recitation discussion styles interact with student personality traits in affecting learning of reflective thinking concepts. To be more specific, the U.S.U. Project was concerned with whether the paucity of significant interactions would again materialize if the basic design of the Harvard Project were replicated.

The U.S.U. Project

The U.S.U. Project has had two major thrusts: one in curriculum development, the other in research. The project's curriculum development efforts have been discussed in Part I of this report. In particular, we noted that during the 1967-68 school year, the project's product was tried out in the Roy High School, Weber County, Utah. The research efforts of the project were planned to coincide with that tryout, as we were interested in student personality-teaching style interactions as they might affect the learning of the types of concepts included in our Outline of Concepts for the Analysis of Public Issues. In other words, within the general area of critical thinking, the Outline of Concepts defines the thinking skills in which we were interested.

In preparing the proposal to the U.S. Office of Education under which the project was funded, two design decisions were made which were departures from traditional research. In the first place, it was decided that research had clearly established that students taught a set of concepts would perform better on tests measuring those concepts than would students who had not received the special instruction. At the same time, arranging for control students and administering tests to them is a time-consuming, expensive process. It hardly seemed worthwhile to go through that process to once again prove the obvious. Consequently, the proposal made no provision for a control group of students (either in the same school or in other schools) who would study the regular social studies curriculum and then be compared against the students who had been exposed to our curriculum.

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*See page 219.

The other design departure had to do with the common practice of administering pretests. We were in the fortunate position, because we would be operating in a team teaching situation, of being able to assign our students randomly to discussion treatments. Consequently, we could assume chance differences among the treatment groups in initial analytic performance. In addition, G Factor scores on the General Aptitude Test Battery were available for the students to serve as a covariate if necessary. We were, therefore, able to save the time usually consumed by pretesting, as well as avoid the possible effects on learning of having taken a pretest, by adopting a posttest-only design.*

In retrospect, these design decisions seem sound when viewed from the perspective of the educational researcher. However, the first decision was unfortunate from the point of view of a curriculum evaluator. Not setting up a control group directed our attention away from the assessment of the comparative effects of our curriculum--an important question to curriculum people, if not to researchers once the general principle that concepts taught are better learned had been established. Moreover, our proposal was submitted before Scriven's (1966) major work in curriculum evaluation had been published. Scriven explicated the notions of *formative evaluation,* aimed at providing judgments about the improvement of a curriculum during its development, and *summative evaluation,* aimed at judging the merit of the final product. Not only did we not build in explicit procedures for formative evaluation, but because we were centered on the merits of research design as opposed to evaluation design, we did not provide for summative evaluation either.** This means that while our research will hopefully make some contribution to the accumulation of knowledge which is the goal of the researcher as scientist, it does not provide systematic answers for the school person who asks, "In terms of test results, how does your curriculum compare with X curriculum?" The question is a reasonable one. And, although we are satisfied, both on the basis of our observations of what happened to the students in our program and on the basis of the redundancy of findings about the effects of teaching concepts explicitly, that our curriculum teaches the analytic concepts, we are somewhat embarrassed that this is not a very convincing response to the school person who must make curriculum adoption decisions. Much of his evaluation must be based on intuitive judgments based on the perusal of our teaching bundles and their match against his stock of knowledge about students and teachers.

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*See Campbell & Stanley, 1963, pp. 25-6 for a discussion of posttest-only design.

**See Larkins & Shaver, 1969 and in press, for a discussion of other possible negative effects of applying traditional research design considerations in curriculum projects.

Setting, Students, Design

The Roy High School serves a rural-suburban community on the outskirts of Ogden, Utah--a city with a population of somewhat over 70,000. Weber County, excluding Ogden, is conterminous with the school district in which the Roy High school is located, and has a population of somewhat over 40,000 people. Much of the county is still farm land and many people are employed in agriculture; many others work in government installations, especially Hill Air Force Base, as technical help. A considerable number of families in the county are those of service personnel stationed at the base. In general, then, the school draws from a "middle class" population. There is little poverty, and no large well-to-do professional-business group.

The school, which first opened its doors to students in 1964, was constructed with team teaching in mind. The social studies facilities include arrangements for large group instruction and small group discussions, with sliding doors providing flexibility in grouping arrangements. The teachers work in teams by subject area, and have been encouraged to be innovative in their approaches to the curriculum. The school population during the 1967-68 school year was approximately 1200. Of these, about 212 juniors assigned to four sections of social studies were the experimental sample for the U.S.U. Project.

Three of the sections had about 60 students in them, while the fourth had just over 30 students.* Scores on a 1968 administration of the General Aptitude Test Battery, Factor G (Intelligence) were available for 207 of the experimental students. The mean score was 104.37, with a standard deviation of 14.70. The group was made up of 101 girls and 117 boys. As one might expect in Utah, the religious composition of the group was predominantly Mormon (81%), with small numbers from other religious groups (15 Catholics, 10 Lutherans, 4 Episcopalians, and one or two each of Baptists, Presbyterians, Methodists, First Christians, Seventh Day Adventists, and Buddhists). The religious composition is of some potential significance because of the finding that scores on some measures of cognitive tendencies (for example, the Dogmatism Scale, Rokeach, 1960) and ideational commitment (for example, the F-Scale, Adorno, et. al., 1950) are related to religious fundamentalism, and to affiliation with the Mormon Church in particular (Shaver & Richards, 1968). In fact, Uhes (1968), in a study conducted as part of the U.S.U. Project, found that the Roy students in the project had a higher mean on the Dogmatism Scale than did the high school students in an earlier study conducted in the midwest by Kemp and Kohler (1965).

The Teachers. Four teachers participated as a team in teaching the project's bundles. Two of these were regular members of the Roy High School staff. One had a master's in history, and had taught for one year previous to teaching in the tryout. The other had his bachelor's degree and had one year's teaching experience, in the Roy High School. The project assistant director had taught elementary school for three years and had taught several courses at the college level for two years before the tryout. His bachelor's degree was in elementary social studies, and he completed his doctoral work at U.S.U. during the 1967-68 academic year, the year of the Roy tryout. The director had taught at the junior high school level previous to and during the Harvard Project. His bachelor's degree was in political sicence, with a doctorate in social studies education.

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*Some readers may wonder about the use of the words "approximately" and "about" in describing the Ns for the student groups. This useage, of course, reflects the changing enrollment in the school. At this point we are simply trying to give the reader a "feel" for our teaching situation. The exact Ns used in statistical analyses will be reported in tables as appropriate.

Design. As already noted, the social studies sections with which the project's teaching bundles were tried out were team taught. The sections met twice a week--Tuesday and Thursday--for one hour. The project's four sections were the ones that met during the first four hours of the school day. (This was largely for the convenience of the project director and assistant director who had to teach university classes in the afternoon.)

The facilities were such that a total section could meet together, or it could be broken into a number of smaller discussion groups. Much of the teaching took place in the "large group" setting. Here the concepts were initially presented using the audio-visual equipment at hand, with the sections broken into smaller groups for more intensive discussion or application of the concepts. The fundamental technique for helping the students apply the concepts was to have them discuss cases presenting public issues. It was with these discussions that the project's research into the effectiveness of teaching styles was carried out.

The Harvard Project had compared the effectiveness of two teaching styles--recitation and socratic. It was the intent of the U.S.U. Project to replicate that comparison, with extension from the junior high to the senior high school level. Also, of course, even though both projects were concerned with teaching students to analyze public issues, the U.S.U. Project had as its very reason for being the development of a curriculum based on a conceptual model of analysis more intensive and extensive than that of the Harvard Project. There was also one other difference.

Because of their experience with team teaching and individualized instruction, the members of the Roy social studies team--especially Bruce Griffin, the team leader at the time of the inception of the U.S.U. Project--were especially interested in a type of discussion leadership which we finally called *seminar* teaching. In this style, the students are presented with a case, as with the recitation and socratic discussions, told that their task is to discuss the case, trying to identify the issue it poses and coming to a decision about the issue, applying the concepts that had been studied in the regular class meetings. The teacher's role, the students are told, is to answer questions that they might have (to serve as an information-idea source) and occasionally to help structure the discussion by suggesting relevant concepts. One further extension of the Harvard Project, then, was the addition of this third teaching style, the *seminar*.

It was decided that for maximum effectiveness, the discussion of the cases presenting public issues should take place with groups of students not exceeding ten in number. With up to sixty students in three sections, this meant that some means had to be devised of splitting four teachers more than four ways--i.e., sixty divided by four equals fifteen students per discussion group. Consequently, it was decided that on the days during which case discussion would take place, the hour of class meeting time would be divided into two periods. Half of the class would participate in case discussion the first period, while the other half of the class studied, or was taught or tested; then the two groups would switch positions for the second period. The order of discussion-study was alternated every other time. Care was also taken that the topic of study during the first period was of minimal relevance to the discussion in which the students were to participate during the second period. This arrangement provided discussion groups of from eight to ten students, and also provided a sufficient number of groups for an adequate research design.

The number of students allowed seven discussion groups in the first and second sections, eight in the third section, and four in the fourth section. Students in each section were numbered in alphabetical order, and then assigned to discussion groups using a table of random numbers. Teachers were also assigned discussion groups using a table of random numbers, and styles were assigned to discussion groups in the same way. Figure 1 gives the groups by section. Note that in order to maintain a balanced number of treatment groups (two of each style for each teacher), two groups were excluded from the analysis. The ones to be excluded were selected using a table of random numbers.

FIGURE 1

Style Assignment by Groups

		Teacher			
Section	Period	1	2	3	4
1	1	Socratic	Seminar	Recitation*	Recitation
	2	Recitation	Socratic	Seminar	
2	1	Seminar	Socratic	Recitation	Socratic
	2		Recitation	Socratic	Seminar
3	1	Recitation	Socratic*	Seminar	Socratic
	2	Seminar	Seminar	Recitation	Recitation
4	1	Socratic			Seminar
	2		Recitation	Socratic	

* Not used in the analysis.

The basic design, then, involved three treatments--recitation, seminar, and socratic teaching--with students assigned randomly to treatment, and with each of four teachers using each treatment twice and assigned randomly to his discussion groups.

During the first part of the tryout, the three discussion styles were used intermittently, about once every three weeks. The primary emphasis was on the initial teaching of the concepts. Discussions using the three styles were seen largely as sessions for training the team in their use. Sections from *Teaching Public Issues in the High School* (Oliver & Shaver, 1966) in which the recitation and socratic styles were described were read and discussed by the four-man team.

Questions which arose in carrying out discussions were also considered in staff meetings, and some tape recordings of discussions critiqued. In general, no intensive, systematic training program was initiated because two of the team members--the director and assistant director--were familiar with the styles, and the other two members seemed to catch on to using them quite easily. Perhaps the greatest difficulty was with the seminar style. The teachers leaned toward discussions that were practically leaderless, as opposed to being overdominated by the teacher.

The more intensive application of the treatment came toward the end of April and at the beginning of May. Although we had not completed the initial teaching of all of the concepts in the Outline to the extent we desired, it became clear that the students needed to be involved in an intensive application of the concepts, both for the purpose of sustaining interest and helping them to see the relevance of the concepts in the discussion of issues. As we had planned that the treatment would constitute the intensive discussion of cases after completion of the study of the Outline, this arrangement followed the basic research plan. Seven cases, four dealing with racial discrimination and three with protests over Vietnam, were discussed over a four-week period.

Teaching Style. As has been noted elsewhere (Wispe, 1953; Oliver & Shaver, 1966, p. 246), one inadequacy of much methods research has been the failure to verify the presence of the independent variable. That is, it has often been conjectured that students were being subjected to different teaching styles, but few studies have systematically gathered data, other than teacher anecdotes and gross ratings, to determine what actual differences in teacher behavior existed. A major contribution of the Harvard Project was the development and use of a systematic observation instrument for confirming differences between recitation and socratic teaching.

This system for confirming style differences and the results of its use have been reported in considerable detail elsewhere (Oliver & Shaver, 1962, 1966, 1967; Shaver, 1964). Based on the earlier work of Bales (1951), the system requires the categorization of affective (socio-emotional) behavior, cognitive behavior, and behavior to handle the procedural aspects of discussion. Brief definitions of the categories are presented in Figure 2. Predicted differences for the categories and the results of testing the differences between proportions of behavior for the Harvard Project are presented in Figure 3. Overall, the differences between the behaviors exhibited by the Harvard Project teachers when using the two styles, as checked by testing the interaction between category and style in a two-way analysis of variance, were large. And, differences also were present on individual categories deemed crucial to the distinction between the styles.

Of the seven cases used in the U.S.U. Project's treatment period, three were selected to be analyzed for teaching style differences. As each teacher used each of the three styles twice for each of the three cases analyzed for teacher style differences, there were a total of 72 discussions to be scored. The three cases were: "Conscience or Obedience?", which raised the issue of the right to encourage young men to burn their draft cards; "DeFacto Segregation", which raised issues in regards to the response a school district should make to a proposal to rezone to make the high schools more racially mixed, and "The Chicago Convention", which raised issues about participation in demonstrations which are likely to result in violence. The three cases are presented

FIGURE 2

Brief Definitions of the Categories in the Observational System for the Description of Teacher Style

Affective, or Socio-emotional, Categories

Solidarity: Status raising language or tone of voice; strong approval or acceptance of another person. Often indicated by enthusiastic acceptance of another's ideas.

Low Positive Affect: Signs of mild approval or acceptance of another person, or of his ideas.

Tension Release: Action interpreted as tension reducing or attempting tension reduction, e.g., laughing or telling a joke.

Tension: Behavior indicative of a state of tension, such as stuttering or becoming tongue-tied.

Low Negative Affect: Statements or acts indicating mild disapproval or rejection of another person, e.g., disbelief of, skepticism about, a statement by the other person.

Antagonism: Deflating, derrogatory or highly negative statements or actions.

Neutral: Acts or statements with no affective message discriminable by the observer.

Cognitive Categories

Suggests Inconsistency: An attempt to lead another person to see inconsistencies in his values, claims, or definitions.

Descriptive: Statements which describe events, i.e., make claims about what reality is like, was like, or will be like.

Evaluative: Statements which evaluate events, i.e., statements of like or dislike, right or wrong, good or bad.

Repeats, Summarizes, Focuses: Statements that restate what has happened during the discussion, or bring attention to what is happening or going to happen.

Clarification: Statements that attempt to clarify the content of the discussion, i.e., clear up the meanings of statements or specific words.

Analogy: Statements setting up for consideration a situation similar to the one under discussion. The situation set up may be hypothetical or one which it is claimed existed, exists, or will exist.

Non-cognitive: Acts with no cognitive--including procedural--message discriminable by the observer.

Procedural Categories

Directs Task-oriented Behavior: Statements directed at controlling behavior which is in line with the task of the group, or at delineating what that behavior will be.

Controls Deviant Behavior: Statements directed at controlling behavior which detracts from the accomplishment of the group task.

FIGURE 3

Predicted Differences in Categorizations of Behavior for Teachers Attempting to Use the Two Styles

Category*	Style for Which Greater Proportion Predicted	Fate of Hypothesis
Solidarity	No difference	Rejected
Low Positive	Recitation	Accepted
Tension Release	Socratic	Rejected
Low Negative	Socratic	Accepted
Antagonism	Socratic	Accepted
Neutral	Recitation	Accepted
Evaluative, Gives	No difference	Rejected
Evaluative, Asks For	Socratic	Accepted
Suggests Inconsistency, Evaluative	Socratic	Accepted
Descriptive, Gives	Recitation	Accepted
Disagreement with Description	No difference	Rejected
Repeat, Summarize, Focus	Recitation	Accepted
Clarification	Recitation	Rejected
Analogy	Socratic	Accepted
Directs Task-Oriented Behavior	Recitation	Accepted

*Categories are not included in which there were insufficient frequencies for analysis or which were not considered central to the styles.

in the appendix. The selection of these cases for analysis was based on the fidelity of the recordings--an important consideration for accurate scoring of verbal interaction. Even then, in three instances, substitutions had to be made because the recordings were unintelligible for one reason or another (basically equipment failure). Cases were selected of as similar content as possible.

Observer Reliability. Before scoring of the 72 discussions could take place, scorers had to be trained to use the observation system developed for the Harvard Project. One graduate assistant* familiarized himself with the reports of the Harvard Project's category system, and trained himself and another graduate assistant to use the system. The system descriptions appeared adequate to the task, and few problems were encountered in the training. The project director, who had been heavily involved in the development of the Harvard system (Shaver, 1961), answered a few questions, and the scorers developed some conventions of their own and found new examples to clarify vague points.

Providing a check on interobserver agreement (reliability) was of concern. The graduate assistant who took responsibility for the use of the category system for verifying teacher style was familiar with the objectives of the U.S.U. Project, including the expectations for differing teacher styles. The other scorer knew little about the project, and the expected differences between styles were not pointed out to him. However, as he was a graduate student in social studies education, it was not possible to keep information about the project from him. Earlier research (Shaver, 1966) had indicated, however, that observer knowledge of the expectations might not be as critical as the admonition to avoid scoring behavior to meet the expectations.

The two observers read the descriptions of the scoring system's conventions and definitions and discussed them thoroughly. Then, the tape recordings of "style" discussions other than the four cases to be used in the analysis of teacher behavior were used for practice scoring. For four consecutive weeks, approximately twenty hours were spent in training.

As with the Harvard Project, interobserver agreement was checked during training using binomial probability paper and then using an adaptation of Chi-square suggested by Bales (1951). In this adaptation, the averages of observed category frequencies for the two observers are used as expected frequencies against which the distribution of obtained frequencies for one of the observers is compared. Bales maintains that this adaptation of Chi-square is a more suitable estimate of reliability than the correlation coefficient because it tends to be more sensitive to differences in frequencies of small magnitude (as well as being somewhat easier to compute). The particular adaptaion is actually that of the goodness-of-fit application of Chi-square in which the null hypothesis (i.e., the hypothesis that the fit is good) is not rejected if the

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*Major responsibility for the training of observers was taken by this doctoral candidate, Doyle Slater. His dissertation, now in the process of being written, involved the effect of teaching style on student use of analytic concepts in discussions without a teacher-leader. The reporting of reliability data here, as well as the later discussion of student behavior in "teacherless" discussion, are heavily dependent upon Mr. Slater's work.

TABLE 1

Summary of Personality and Learning Outcomes Measures Involved in Significant Interactions Between Teaching Style and Student Personality

	Learning Outcomes Measures					
Personality Measures	Head-lines G	SIAT No. 4	SIAT No. 3	SIAT No. 2	SIAT No. 1	Unit
Guilford-Zimmerman						
Factor A	X					
Factor E					X	
Factor F		X				X
Factor O				X		
Need-Cognition	X			X		
Need-Structure		X				
Word Description		X	X			
Submissiveness	X					
F-Scale		X				

probability falls in the range from .05 to .95. To increase the rigor of the test, in part to compensate for the lack of independence of cell entries, Bales suggests the use of .50 rather than .05 as the lower end of the criterion range. This suggestion was adopted for the Harvard Project and for the U.S.U. Project. Also, any cells with frequencies less than four (rather than the usual five or ten) were combined with other cells in computing the Chi-Squares.

The results of the reliability estimates for the scoring of teacher and student behavior are summarized in Tables 2 and 3. Although the great majority of Chi-squares have probabilities over .50 (82.5% for teacher behaviors and 78% for student behaviors), there are a considerable number falling below that criterion. This means that teaching style differences are likely to be attenuated and less easy to detect.

Teaching Style Differences

The research design for the U.S.U. Project assumed that three teaching styles were used during the discussion of public issues cases. The verification that, in fact, the Ss were subjected to different treatments is an important design consideration to which we turn next. To provide relevant data, discussions of the three cases noted earlier ("Conscience or Obedience?", "Defacto Segregation", and "The Chicago Convention") were scored. Originally it was intended to score the first twenty minutes of each discussion. However, because of interruptions due to such things as the regular school routine (announcements, etc.), twenty minutes was not available for all discussions, and it was decided to score as close as possible to fifteen minutes of each discussion. Even then the time available was not uniform for all discussions, so frequencies

TABLE 2

Summary of Chi-Square Probabilities for Reliability Estimates for Scoring of Teacher Behavior

Probability	Recitation Categories			Seminar Categories			Socratic Categories			Row Total
	Aff.	Cog.	Total	Aff.	Cog.	Total	Aff.	Cog.	Total	
.90-1.00	0	6	6	4	6	10	0	9	9	25
.80-.89	3	5	8	1	4	5	1	3	4	17
.70-.79	6	2	8	5	6	11	8	6	14	33
.60-.69	4	5	9	1	3	4	2	1	3	16
.50-.59	5	4	9	7	5	12	6	2	8	29
.40-.49	0	0	0	0	0	0	0	0	0	0
.30-.39	3	2	5	1	0	1	4	3	7	13
.20-.29	1	0	1	2	0	2	2	0	2	5
.10-.19	2	0	2	0	0	0	1	0	1	3
.00-.09	0	0	0	0	0	0	0	0	0	0

TABLE 3

Summary of Chi-Square Probabilities for Reliability Estimates for Scoring of Student Behavior

Probability	Recitation Categories			Seminar Categories			Socratic Categories			Row Total
	Aff.	Cog.	Total	Aff.	Cog.	Total	Aff.	Cog.	Total	
.90-1.00	1	3	4	2	5	7	2	4	6	17
.80-.89	4	6	10	2	5	7	3	7	10	27
.70-.79	3	6	9	5	2	7	2	4	6	22
.60-.69	3	2	5	0	3	3	6	3	9	17
.50-.59	7	4	11	9	7	16	4	4	8	35
.40-.49	0	0	0	0	0	0	0	0	0	0
.30-.39	4	2	6	1	1	2	3	1	4	12
.20-.29	1	1	2	2	1	3	3	1	4	9
.10-.19	1	0	1	3	0	3	1	0	1	5
.00-.09	0	0	0	0	0	0	0	0	0	0

of behavior were converted to proportions of behavior for each discussion in order to provide a common base for comparison.

As with the earlier confirmation of teacher style for the Harvard Project, complex analysis of variance was used to analyze the data. As data expressed as proportions commonly do not meet the assumptions of homogeneity of variances and normality of distributions which underly the analysis of variance (Shaver, 1961, p. 80), the proportions were converted to angles using an inverse sine transformation. The analyses were then carried out on the transformed proportions.

The first, most basic question was whether the teachers succeeded in behaving differently as called for by the treatment descriptions. Based on experience, the general hypothesis was that the teachers would succeed in differentiating their behavior. In order to determine if they did do so, the interaction effect of teaching style and categories was tested to determine if there were different patterns of behavior scored in the categories from style to style. Actually, four-way analyses of variance were computed (teaching style by category by teacher by discussion) in order to account for as much variance as possible and reduce the error term. The results of these analyses are presented toward the bottom of Tables 4 and 5. Note that the F-ratio for the interaction term is sizeable, indicating different patterns of teacher behavior for the three styles. Overall, it appears that the teachers did differentiate their behavior for the three styles. Tables 6 and 7 indicate what one would expect: Differences in teacher behavior were reflected in significant interactions between style and category for student behavior.

Tables 4 and 5 also contain the mean transformed proportions of the individual categories by style and the results of analyses of variance testing for the significance of differences among those means. The tendency for the teachers to use more solidarity from socratic to seminar to recitation discussions (Table 4) was not surprising, nor was the tendency for the teachers to use more low positive affect from recitation to socratic to seminar discussions. These findings probably reflect the lower participation rate of the teacher in seminar discussions,* coupled with the need to enter seminar discussions to encourage participation. The lack of differences among transformed proportions of tension release and tension confirm the results of the Harvard Project (see Figure 3). It is interesting and unexpected, however, that there were no significant differences among the means for the low negative and antagonism categories. Using the formula suggested by Ferguson (1966, p. 296) for the F test for orthogonal a priori comparisons between pairs of means (comparisons between recitation and socratic means were anticipated before the overall analysis), the difference between the recitation and socratic means is not significant for low positive effect, but significant between the .05 and .01 levels for antagonism. The failure to exhibit more low negative affect in the recitation as compared to the socratic discussions does not coincide with the Harvard Project model (see Figure 3).

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*Overall, when using the seminar style the teachers accounted for 30.32% of the acts, as compared to 63.79% for the recitation style, and with 54.95% with the socratic style.

TABLE 4

Analyses of Variance for Affective Categories and Style for Transformed Proportions of Teachers' Acts

Category	Rec.	Style Sem.	Soc.	F	P (d.f.=2/60
1 Solidarity	.84	.51	.38	3.66	< .05
2 Low Positive	8.45	2.80	5.45	57.66	< .01
3 Tension Release	.31	.50	.39	.71	> .05
4 Tension	.86	.99	1.18	.71	> .05
5 Low Negative	1.18	1.79	1.64	2.26	> .05
6 Antagonism	.13	.54	.73	2.70	> .05

Source of Variance*	S.S.	d.f.	Mean Square	F**	P
Rows (categories)	1428.03	5	21.61		
Columns (styles)	43.22	2	285.61		
RXC (category by style)	354.56	10	35.46	31.07	<.001
Remainder Within Cells (error term)	410.87	360	1.14		

*The sources of variance were extracted from a four-way analysis of variance (category by style by teacher by discussion). However, for the sake of convenience, only those sources of variance directly related to the style by category interaction are reported in this table. It should be kept in mind that the error term comes from the four-way analysis.

**The two-way interaction is the only effect of interest here. In fact, the row and column effects are not interpretable.

TABLE 5

Analyses of Variance for Cognitive Categories and Style for Transformed Proportions of Teachers' Acts

Category	Rec.	Style Sem.	Soc.	F	P (d.f.=2/60)
1 Evaluative Inconsistency	.00	.00	.34	17.06	< .01
2 Descriptive Inconsistency	.00	.00	.02	3.43	< .05
3 Descriptive-Teacher Gives	37.44	26.18	24.48	24.97	< .01
4 Descriptive Disagrees	.17	.22	.23	.005	> .05
5 Evaluative-Teacher Asks	.56	2.74	8.30	67.70	< .01
6 Evaluative-Teacher Gives	.21	.30	.43	2.01	> .05
7 Evaluative Disagrees	.00	.00	.00	.00	> .05
8 Repeats, Summarizes, Focus	7.38	7.38	5.05	6.93	< .01
9 Clarification	3.99	3.70	2.57	4.62	< .05
10 Analogy	1.49	2.74	9.13	29.12	< .01
11 Directs Task	5.39	11.72	3.59	33.99	< .01
12 Controls Deviation	.19	.05	.12	1.37	> .05

Source of Variance*	S.D.	d.f.	Mean Square	F**	P
Rows (categories)	55631.36	11	487.58		
Columns (styles)	6.90	2	3.45		
RXC (category by style)	4936.51	22	224.39	30.04	< .001
Remainder Within Cells (error term)	5377.88	720	7.47		

*The sources of variance were extracted from a four-way analysis of variance (category by style by teacher by discussion). However, for the sake of convenience, only those sources of variance directly related to the style by category interaction are reported in this table. It should be kept in mind that the error term comes from the four-way analysis.

**The two-way interaction is the only effect of interest here. In fact, the row and column effects are not interpretable.

TABLE 6

Analyses of Variance for Affective Categories and Style for Transformed Proportions of Students' Acts

		Style	
Category	Recitation	Seminar	Socratic
1 Solidarity	1.05	.04	.00
2 Low Positive	2.64	3.41	2.86
3 Tension Release	2.86	2.19	2.80
4 Tension	5.38	4.98	7.78
5 Low Negative	1.28	3.46	3.24
6 Antagonism	.64	1.42	1.31

Source of Variance*	S.S.	d.f.	Mean Square	F**	P
Rows (categories)	1501.28	5	300.26		
Columns (styles)	53.57	2	26.78		
RXC (category by style)	148.04	10	14.80	4.62	< .01
Remainder Within Cells (error term)	1153.13	360	3.20		

*The sources of variance were extracted from a four-way analysis of variance (category by style by teacher by discussion). However, for the sake of convenience, only those sources of variance directly related to the style by category interaction are reported in this table. It should be kept in mind that the error term comes from the four-way analysis.

**The two-way interaction is the only effect of interest here. In fact, the row and column effects are not interpretable.

TABLE 7

Analyses of Variance for Cognitive Categories and Style for Transformed Proportions of Students' Acts

Category	Recitation	Style Seminar	Socratic
1 Evaluative Inconsistency	.00	.01	.01
2 Descriptive Inconsistency	.04	.00	.00
3 Descriptive-Teacher Gives	47.84	41.92	34.79
4 Descriptive Disagrees	.36	1.19	.85
5 Evaluative-Teacher Asks	1.83	5.07	10.13
6 Evaluative-Teacher Gives	.05	.10	.41
7 Evaluative Disagrees	2.36	3.06	1.93
8 Repeats, Summarizes, Focus	2.28	2.56	2.02
9 Clarification	.84	1.37	1.05
10 Analogy	.21	.87	.08
11 Directs Task	.03	.00	.01

Source of Variance*	S.S.	d.f.	Mean Square	F**	P
Rows (categories)	108159.60	10	10815.96		
Columns (styles)	27.22	2	13.61		
RXC (category by style)	2893.90	20	144.69	26.72	< .01
Remainder Within Cells (error term)	3573.81	660	5.41		

*The sources of variance were extracted from a four-way analysis of variance (category by style by teacher by discussion). However, for the sake of conveneince, only those sources of variance directly related to the style by category interaction are reported in this table. It should be kept in mind that the error term comes from the four-way analysis.

**The two-way interaction is the only effect of interest here. In fact, the row and column effects are not interpretable.

The data reported in Table 5 indicate a close correspondence between the cognitive behaviors of the U.S.U. Project teachers and those of the Harvard Project (see Figure 3). Categories 1, 3, 4, 5, 8, 9, 10, and 11 correspond with the model of teaching and with the confirmations of expectations in the Harvard Project's comparisons of recitation and socratic teaching. Interestingly, the results for Category 6 depart from the Harvard finding, but are in line with the model (i.e., no difference was anticipated in the proportion of value judgments given by recitation and socratic teachers). Also, although there were so few acts scored in the category of *teacher suggests descriptive inconsistency* that they were not analyzed for the Harvard Project, the few acts in that category all fall in the socratic style for the U.S.U. Project. This is in line with the model of a probing socratic teacher. It also is interesting that the proportions of teachers' behaviors in the seminar discussions frequently fall between those for the recitation and socratic discussions. One exception is Category 11, *directs task-oriented behavior*. Here seminar teaching resulted in a greater proportion of acts. This is, of course, in line with the description of the seminar teacher as one who interjects himself into the discussion to provide needed structure.

Having looked at differences among the styles, it is of interest to ask whether the individual teachers succeeded in differentiating their teaching behavior, as indicated by significant interactions between style and category. The results of testing these interactions for each teacher are presented in Table 8. While not of the same magnitude as the F-ratios for the analyses with

TABLE 8

Tests of Interaction Between Category and Style for Transformed Proportions of Acts of Individual Teachers

Teacher	Categories	Mean Square RXC	Remainder	d.f.	F-Ratio*
1	Affective	4.85	.37	10/80	13.06
	Cognitive	17.90	6.31	20/150	2.83
2	Affective	2.53	1.00	10/80	2.53
	Cognitive	123.21	9.54	20/150	12.91
3	Affective	12.00	1.54	10/80	7.81
	Cognitive	57.58	5.26	20/150	10.94
4	Affective	28.59	1.66	10/80	17.27
	Cognitive	74.15	8.76	20/150	8.46

*All significant beyond the .01 level.

teachers pooled, all of the F-ratios are significant at the .01 level. Nevertheless, there also was a significant interaction between teacher and category for each style (see Table 9), indicating considerable variability among the teachers within the general style patterns. This is not surprising, as educators commonly acknowledge that personality differences among teachers, as well as situational differences (e.g., the types of students who happen to be in one's classes), will affect teacher behavior. We were looking for general uniformity in behavior, not strict conformity. This we attained, despite some low scorer reliability estimates. The major question, to which we turn next, is whether style had an effect, especially in interacting with student personality traits.

TABLE 9

Tests of Interaction Between Category and Teacher for Transformed Proportions of Acts of Teachers for the Three Styles

Style	Categories	Mean Square RXC	Mean Square Remainder	d.f.	F-Ratio
Recitation	Affective	20.47	.95	14/125	21.47*
	Cognitive	13.31	3.53	30/200	3.77*
Seminar	Affective	5.27	1.47	14/125	3.59*
	Cognitive	20.30	12.26	30/200	1.65**
Socratic	Affective	6.26	1.00	14/125	6.25*
	Cognitive	18.68	6.62	30/200	2.82*

*Significant beyond the .01 level.

**Significant beyond the .05 level.

TABLE 10

Values Resulting from the Transformation of Some Proportions with the Inverse Sine Transformation

Proportion	Degrees*	Proportion	Degrees*
.01	.567	.25	14.483
.02	1.150	.30	17.450
.03	1.717	.35	20.483
.04	2.300	.40	23.583
.05	2.867	.45	26.750
.06	3.433	.50	30.000
.07	4.017	.60	36.867
.08	4.583	.70	44.433
.09	5.167	.80	53.133
.10	5.733	.90	64.150
.15	8.633	1.00	90.000
.20	11.533		

*Treated as scores for the analysis

CHAPTER ELEVEN

MEASURES OF LEARNING AND PERSONALITY

The major research concern of the U.S.U. Project was with the effect of style on learning. Several measures of learning were administered to get at that effect. It will be recalled that the basic research design for the project called for posttests only, as students were randomly assigned to treatment groups. These posttests were administered to the students following the treatment period in the Spring of 1968--that is, after the students had been subjected to the discussion of the seven public issues cases with the teachers using the three styles. The posttests included paper-and-pencil tests and teacherless group discussions which were later scored using an observational system.

Paper-and-Pencil Tests

Four paper-and-pencil tests used in the Harvard Project were administered for the U.S.U. Project--the Social Issues Analysis Test No. 1 (SIAT No. 1): Argument Analysis Test, the Social Issues Analysis Test No. 2 (SIAT No. 2): Argument Description and Rebuttal Test, the Wagmis test, and the Headlines Test. The rationale behind the development of the SIAT tests and checks on their validity have been discussed elsewhere (Oliver & Shaver, 1962; 1966). Basically, they represent attempts to move beyond the multiple-choice, true-false types of tests in which the student deals with only fragments of problems.

The SIAT No. 1 is a group administered test with multiple-choice items. The student is asked to read a one-page dialogue between two people arguing about a public issue (e.g., the role of labor unions) and then asked to identify the functions that identified statements play in the argument. An item might ask, for example, whether a statement by one of the antagonists gave examples to support a claim, gave examples to suggest that a definition was not adequate, gave examples to support or illustrate a definition, etc. A split-half (corrected with the Spearman-Brown Prophecy Formula) reliability coefficient of .81 was obtained for this test with 109 eighth graders in the Harvard Project. The split-half, corrected reliability coefficient for the U.S.U. Project's sample of eleventh graders was .67.

The SIAT No. 2 is also a multiple-choice, group administered paper-and-pencil test. Students are again given an argumentative dialogue to read. They are then asked questions to see if they can (1) identify what the argument is about (including what positions the disputants have taken and which position would be supported by different values and facts) and (2) select rebuttals to statements made in the argument that would help to clarify the disagreement or move the antagonists toward agreement. Four separate forms of the SIAT No. 2 were used, one dealing with each of the following topics--labor, integration, atomic fallout, and education. The scores on the four forms were summed to give a total score that was used in the analysis. Using the correlations (again corrected with the Spearman-Brown Formula) between two combined scores (labor and integration form scores combined and correlated with the combined scores on the atomic fallout and education forms), the

Harvard Project obtained a reliability estimate of .69. The test-retest coefficient between total scores with an almost two-year lapse of time was .60. The correlations among scores on the various forms and between the forms and the total SIAT No. 2 scores for the U.S.U. Project are shown in Table 11. The mean correlation among the forms is .435. Using this coefficient in the Spearman Brown Formula to predict the reliability of a test four times the length of any one form (because scores on the four forms were summed to give the score for analysis), as suggested by McNemar (1962, p. 208), a reliability coefficient of .75 was obtained. Interestingly, the mean of the form-total correlations is .75.

TABLE 11

Correlations Among Scores on the Four SIAT No. 2 Forms
and on the Total SIAT No. 2

	Labor	Integration	Atomic Fallout	Education
Labor				
Integration	.33			
Atomic Fallout	.56	.37		
Education	.47	.42	.46	
Total Score	.78	.65	.79	.77

The Wagmis Test was included in the Harvard Project's testing program to determine the effect of the curriculum on standardized, general critical thinking tests, as opposed to the project's tests developed in the context of controversy over public issues. It was used for the U.S.U. Project to replicate the previous project's testing program in checking out style-student personality interaction, even though, as a look at Table 1 will indicate, it was involved in no significant interactions in the Harvard Project. The Wagmis Test is made up of subtests one, two, and four from the Watson-Glaser Critical Thinking Appraisal, Form Am and parts six and seven of the Michigan State Test of Problem Solving, Form A. (Special permission was received to use the test for experimental purposes.) The subtests of the Wagmis Test deal with inference, recognition of assumptions, interpretation, examining written arguments, and relating assumptions to arguments. These were the sections of the original tests that seemed most relevant to a curriculum aimed at teaching students to analyze public issues. The three subtests of the Watson-Glaser Critical Thinking Appraisal had a sufficient number of items (20, 16, and 14 respectively) to be considered for separate statistical analysis, and reliability coefficients for the Roy High School sample were computed separately for them. The three coefficients (split-half, corrected with the Spearman-Brown formula) were .37, .71, and .48. Only the coefficient for the second subtest is of adequate magnitude. The reliability coefficient for the 77 items of the total test (again split-half, corrected) was .79.

The three tests discussed above comprised the paper-and-pencil tests of learning carried over from the Harvard Project. The Headlines Test is a test of student interest in public issues, also from the Harvard Project, which was used in the U.S.U. Project. Each item asks the student to rank three newspaper headlines in the order of how interested he would be in reading the articles. For the Harvard Project, two scores were derived--one was made up from items which dealt with topics studied as part of the project's two-year public issues curriculum, the other was made up of items dealing with other public issues. As the U.S.U. Project was geared toward teaching the analytic concepts in the Outline, rather than toward engaging students in the analysis of specific public issues, only one score was derived from the Headlines Test. That score was made up of the weighted choices (a value of 2 for first choice, 1 for second choice, 0 for third choice) of headlines dealing with public issues. The Harvard Project obtained corrected split-half reliability coefficients of .73 and .55 for the two subtests (the first coefficient is for the project-related items). The corrected coefficient for the total test for the U.S.U. Project was .79.

As one dependent variable, the Harvard Project used a sum of scores on four teacher-made tests which had been administered at the end of units dealing with public issues. This summation of scores was called the Unit Test. The tests each called for recall of factual material, the application of the analytic concepts to issues studied in the unit, and response to one or two essay questions. Five brief quizzes on material dealing with the negro in America were administered to the Roy High School students during and immediately after the treatment discussions. Scores on these five tests were combined into Negro Unit Test: Subtest A (three quizzes administered during treatment) and Negro Unit Test: Subtest B (administered following treatment). The correlations between Subtests A and B was .55. Subtest A had 30 items in it--26 multiple-choice and 4 true-false; Subtest B had 20 items--10 multiple choice and 10 true-false. Although combining the two subtests does not fit the model of combining two evenly split halves on a test, correcting the coefficient with the Spearman-Brown Formula, which yields an $r = .71$, probably provides a reasonable estimate of the reliability for the total test (Negro Unit Test: Total).

Another learning measure for the U.S.U. Project was similar to a test in the Harvard Project's testing program based on the need for classroom assessment. The U.S.U. Project test had 50 possible points, made up of multiple-choice, matching, ranking, and true-false items. This test was administered as the final course test before the end of the school year (we will call it the Final Exam). It reviewed the student's knowledge of the definitions of the analytic concepts and his ability to apply them to simple situations. As some items on the test (such as ranking items) did not lend themselves readily to a split for a split-half correlation, the Kuder-Richardson Formula 21 was used to estimate reliability. The coefficient was .76.

Course Evaluation. One other paper-and-pencil measure yielded data for the analysis--a Course Evaluation Form filled out by the students. The form, based on one developed through factor analysis at the University of Washington (Guthrie, 1954), contained ten items on which the students rated the course as "Outstanding", "Superior", "Competent", "Fair", or "Of less Value", with values of 1 to 5 respectively. (The ten items are presented in Figure 4.)

FIGURE 4

Items on the Roy Course Evaluation Form

Rate this year's social studies course in each of these items. 1 = Outstanding; 2 = Superior; 3 = Competent; 4 = Fair; 5 = Of Less Value

1. Has increased my skills in thinking.
2. Has helped me broaden my interests.
3. Stressed important material.
4. Has motivated me to do my best work.
5. Has given me new viewpoints or appreciations.
6. Has been clear and understandable.
7. Has presented many thought-provoking ideas.
8. Has given me new tools for attacking problems.

The following two questions call for overall ratings.

9. What overall rating would you give the course?
10. How would you have rated the course if it had been named "Problems of Democracy" instead of "American History"?

The first eight items were summed to give an *Evaluation: Total* score for analysis, and the last two items were treated separately in the analysis.

The reliability coefficient for the Evaluation: Total measure for the 174 Roy High School students who completed it was .66, estimated with the Kuder Richardson Formula #21. Considering that the score is based on only eight items, it seemed fortunate that the reliability was that high. Also, responses to Item No. 9 in Figure 4, calling for an overall evaluation of the course, correlated highly ($r = .75$) with the Evaluation: Total score. Responses to the last item, calling for a rating of the course as "problems of democracy" as opposed to "American history", correlated .45 with the Evaluation: Total score.

Student Discussions as a Measure of Learning

The SIAT paper-and-pencil tests represent some advance in validity over typical tests of "critical thinking". The content does have to do with public issues instead of advertisements and such matters. The student is faced with a dialogue over the issue involved, cast in the argumentative tones common in discussions of public issues. But, if one is concerned about validity in the context of a project aimed largely at affecting more rational dialogue about public issues, it is clear that the SIATs No. 1 and 2, like other paper-and-pencil tests, have the student respond to a fragmented dialogue, break the dialogue into units for the student, and focus his attention on specific statements, as well as provide an array of responses from which to choose. Such structure is not available in our common-day discussions and reading. Consequently, the Harvard Project moved to the analysis of the content of student discussions of public issues as a more valid assessment of knowledge and application of analytic concepts.

Two basic situations were used to obtain student discussion content for analysis in the Harvard Project. The first, labeled *SIAT No. 3: Analysis of Written Dialogue,* involved giving the student a brief written dialogue in an individual interview setting and asking him to identify the main points of disagreement between the disputants and suggest ways of clarifying or settling the disagreements. The student's responses, elicited when necessary by planned proddings by the interviewer, were tape recorded and later scored using a standard scoring sheet. The second, *SIAT No. 4: A System for Analyzing "Free" Discussion,* involved tape recording student behavior for later scoring with a systematic observation system.

Content for analysis with the SIAT No. 4 was obtained in two ways: First, following the administration of the interview for SIAT No. 3, the student was read a brief case presenting a public issue and asked what he thought should be done about it. The interviewer then adopted a socratic stance and challenged the student's responses, in particular attempting to force him to deal with inconsistencies in his position. Second, students were put in small groups (about 12 students in each), given a case, and told that they had twenty-five minutes to come to a unanimous decision on how to handle the issue presented by the case. The teacher then left the room, returning in twenty-five minutes to hear a report on the results of the discussion. In both situations, the discussions were tape recorded for later scoring.

Categories for the scoring instrument (SIAT No. 4) were based on the concepts which the Harvard Project sought to teach the students. The instrument has been thoroughly described elsewhere (Oliver & Shaver, 1962; 1966), and will not be presented in detail here because the categories were modified for the U.S.U. Project.

It will be recalled that a major curricular purpose of the U.S.U. Project was to expand and intensify the set of concepts for the analysis of public issues that had been developed by the Harvard Project. To be valid, an instrument to be used for scoring the content of student discussions as a measure of learning must reflect the conceptual frame underlying instruction. Consequently, a new scoring scheme for the U.S.U. Project, the Analytic Content Observation System (ACOS), was developed, based on SIAT No. 4. The scoring conventions for ACOS are basically the same as for SIAT No. 4: for example, the simple sentence is the basic unit scored and the scorer assesses the meaning of each statement within the context of the Outline of Concepts, not as it might be interpreted by others in the discussion. However, there are considerable differences in the categories for the SIAT No. 4 and ACOS.

The question of validity for the categories in ACOS is largely one of content. That is, validity rests on whether the categories adequately (in terms of content and comprehensiveness) reflect the Outline of Concepts. The graduate assistant who took responsibility for the verification of teacher style also took major responsibility for the development of ACOS.* His first step was to become completely familiar with the Outline of Concepts and with SIAT No. 4. He then developed a set of categories and these were critiqued by the project director and assistant director as to (1) whether the definitions for the categories were adequate representations of the concepts in the Outline. (2) whether all major concepts from the Outline that might be used in oral discussion were represented, and (3) which categories might be combined to make the system less unwieldy. This last decision was necessary because it was impossible to have a scoring instrument as comprehensive and detailed as the Outline. Several revisions were made, each time with the concern that the definitions accurately reflect the Outline, that major concepts not be left out, and that scoring be practicable. The resulting set of scoring conventions is presented in the appendix, and a summary of the ACOS categories is presented in Figure 5.

Note that all of the categories in the system are not "valued"--that is, behaviors scored in them are not assumed to reflect concepts in the Outline. This is because the system is meant to be comprehensive. Rather than scoring random or time-interval samples of behavior, or only scoring valued acts, it was decided to score all intelligible statements in the student discussions. Obviously, some of these would not be valued.

Also, as with SIAT No. 4, ACOS calls for double scoring with some categories. Every statement is scored in one of the first fifteen categories. In addition, the observer makes a judgment as to whether the statements points out or recognizes an inconsistency, qualifies a judgment or indicates tentativity about a judgment, or analyzes the intellectual process of the discussion as contrasted with engaging in the persuasive dialogue. If the statement seems to be carrying out one of these functions, it is scored in Category 16, 17, or 18 (Consistency-Inconsistency, Tentativity-Qualification, Analytic Position) as well as in one of the first fifteen categories. This means that a statement may receive a weight of "0" as a valued act (e.g., if scored in Category 1, Factual Claim), a weight of "1" (e.g., if scored as a General Value Judgment only, *or* if scored in Category 1, Factual Claim *and* in Category 17, Tentativity Qualification), or a weight of "2" (e.g., a statement scored in Category 2, General Value Judgment *and* in Category 17, Tentativity-Qualification.)

Reliability

As with the instrument to verify teacher style, the graduate assistant responsible for the scoring and one other graduate assistant learned to use

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*For a more complete description of the development of ACOS, see his dissertation (Slater, in preparation).

FIGURE 5

Categories in the Analytic Content Observation System

Category	Definition*
1. Factual Claim	Statements describing events or generalizations based on events.
2. General Value Judgment**	Expression of preference for general moral values, such as free speech.
3. Specific Value Judgment	Statement that an object, person, action, or decision is good or bad, desirable or undesirable.
4. Repeat, Summarize, Focus	Restatements or synopses of what has occurred during the discussion, or statements directing attention to matters to be discussed.
5. Clarification	
A. Content**	An attempt to make the meaning of a sentence or set of sentences more clear.
B. Assumption**	Comments explicating, questioning, or pointing out the need to clarify an assumption.
6. Language	
A. Definition**	Request for or offering of word clarification or definition.
B. Emotive Loading**	Comments recognizing or request clarification of emotive loading.
7. Challenge-Support	
A. Sample*	Statements questioning or supporting the adequacy of the sample underlying a claim.
B. Analogy Analysis**	Challenge to or support of an analogy, usually in terms of differences and similarities in the situations claimed to be analogous.
C. Evidence, Source, Authority**	Statement questioning or offering the basis for a claim.
D. Uncritical	Statement questioning or supporting claims but lacking in specificity or not related to Category 7A, 7B, or 7C.

FIGURE 5 CONTINUED

8.	Distinction**	Comment that distinguishes ethical from non-ethical, public from private, factual from value, or value from definitional issues.
9.	Value Conflict Resolution**	Statements that refer to a third higher value, suggest an alternative policy, propose a challenging or clarifying case to resolve a value conflict.
10.	Frame of Reference**	Statements indicating awareness that the speaker's or another's view of what is, can be, or should be is affecting his position on an issue.
11.	Relevance**	Statements questioning or stating whether a previous statement is pertinent or central to the argument.
12.	Case	Statements of hypothetical or real situations assumed to be similar to the one under discussion.
13.	Debate Strategy**	Statements that recognize diversionary tactics or persuasive techniques used by the speaker or by others.
14.	Diversionary Tactics	Statements, such as ad hominom attacks, which divert the discussion illogically, appear to be intended to deliberately confuse or obscure, or indicate the discussion is being taken lightly.
15.	Task Direction	Statements controlling discussion procedures.
16.	Consistency-Inconsistency**	Statements indicating an awareness of a possible inconsistency in the speaker's or someone else's position--factual, evaluative, or definitional.
17.	Tentativity-Qualification**	Statements recognizing exceptions to a factual or value claim or indicating lack of absolute certainty.
18.	Analytic Position**	Statements which take the speaker out of the persuasive context of the discussion and focus on the intellectual or analytic processes in order to move the discussion along.

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*More complete definitions, including examples, are in the appendix.

**Valued categories.

ACOS. About four hours a day were put in for three weeks in the training and practice sessions. Again binomial probability paper, as discussed by Bales (1951), was used to estimate interobserver agreement during training, and an adaptation of chi-square was used to estimate agreement on the tapes used for data analysis.

Following the teaching style, treatment discussions, the Roy students were given three cases to discuss on different days. The cases (included in the appendix) were: "Bugging the Prison", regarding a sheriff who had microphones installed in a new jail so that conversations in all rooms, including the one where prisoners conferred with their lawyers, could be monitored; "The Armband Case", involving the right of students to wear black armbands to school in protest against the Vietnam War; and "Gambling and Education", involving a proposal to use proceeds from legalized gambling to support public education. As with the teaching style discussions, half an hour was allowed for the discussion of each of the three cases, including time to move in and out of the room. Also, the order of discussion was rotated for the students in the two discussion periods in each section (see Figure 1).

The case was read to the discussion group by the teacher. The group was then told that it had twenty minutes to arrive at a unanimous decision as to how to handle the problem in the case. The teacher then left the room to return in twenty minutes. The discussions were tape recorded. In addition, graduate students previously unconnected with the project were hired to sit in a corner of the discussion room and whisper into another track on the recorder the names of students as they spoke in the discussion. (This allowed the identification of individual students when the discussions were scored with ACOS.) Name tags were set on the desks of the students, who sat in a circle for the discussion. With the small discussion groups, observers had little difficulty in identifying the students. At the same time, the presence of the additional person and his whispering into a microphone seemed to have little effect on the students. However, the discussions probably were set up too close to the end of the school year, and other distractions kept some of the groups from fully engaging themselves in the discussions. Before the third (and last) discussion, it seemed necessary to remind the students that this was the last discussion to be held and were asked to be certain to continue to deal with the issues until the problem in the case had been adequately discussed. If the presence of an additional adult in the room had any effect, it did not appear to be one of positive motivation.

With the three cases, each discussed by two groups for each of the three teaching styles used by four teachers, there were seventy-two discussions to be scored. The reliability estimates for these discussions, based on the frequencies for individual categories, are summarized in Table 12. All of the probabilities except one exceed the .50 criterion adopted from Bales. In fact, the distribution of probabilities is definitely skewed, with higher frequencies in the higher probabilities. Considerable confidence seemed justified in the consistency of application of ACOS by the two scorers.

There is another reliability question of interest, however. That is, given high inter-observer agreement, to what extent were the students consistent in their discussion behavior from one discussion to the next? Table 13 presents the correlations among the total valued acts (a summation of frequencies for all of the valued categories in ACOS) of individual students for the

TABLE 12

Summary of Chi-Square Probabilities for Reliability Estimates for Scoring Student Discussions with the Analytic Content Observation System (ACOS)

Probability	Case 1	2	3	Total
.90-1.00	11	10	12	33
.80-.89	4	6	4	14
.70-.79	4	5	2	11
.60-.69	1	0	3	4
.50-.59	3	3	3	9
.40-.49	1			1
.30-.39				
.20-.29				
.10-.19				
.00-.09				

TABLE 13

Correlations Among the Total Valued Acts for Discussions of the Three Cases

	1	2	3	4
1. Bugging the Prison				
2. The Armband Case	.57			
3. Gambling and Education	.62	.57		
4. Total (1 + 2 + 3)	.85	.86	.84	

discussions of the three cases. For the analyses of student learning to be presented later, the valued acts for all three cases were summed to give one, more reliable, measure for each student. It makes sense to ask, then, Given the intercorrelations among the discussions, what would be the reliability of a score based on all three discussions? To provide some indication of that reliability, the average intercorrelation was computed ($r = .59$), and the Spearman-Brown Prophecy Formula used to estimate the reliability coefficient for a test three times the length of any one discussion (McNemar, 1962, p. 208). The predicted coefficient is .81, a very respectable reliability estimate. Interestingly, this predicted coefficient is very close to the average correlation ($r = .85$) of the individual discussions with the total score.

Personality Measures

It will be recalled that one of the purposes of the research of the U.S.U. Project was a replication of the Harvard Project's research at another grade level and with an additional teaching style. In particular, it was of interest whether the same interactions would emerge between student personality and teaching style in affecting learning. The choice of measures to get at student personality for the U.S.U. Project was, with a couple of exceptions, based on their use in the Harvard Project. The various measures used are described briefly in Figure 6. Those used in the Harvard Project are discussed in Oliver and Shaver (1962; 1966).

The Gough-Sanford Rigidity Scale (Rokeach, 1960, pp. 418-419) was not used in the Harvard Project, but was included in the U.S.U. Project for two reasons: (1) because of an interest in correlating the cognitive rigidity scale and the F- (Adorno, et. al., 1950) and Dogmatism Scales to determine if Rokeach's (1960) claims of independence would be substantiated with our high school sample, and (2) because tenacity of beliefs might be related to the acceptance of our analytic concepts by the students in our sample. The Dogmatism Scale (Rokeach, 1960) was administered because it appeared that our curriculum was really an attempt to make a basic impact on the frames of reference of our students. To the extent that our instruction did demand broad frame of reference modifications, dogmatism would be expected to bear a relationship to learning. It also appeared that the socratic discussion, with its adversarial, open setting, might be more threatening, and therefore less encouraging of learning, for students high in cognitive rigidity or dogmatism.

The Category Width Scale (Pettigrew, 1958) was included partly out of curiosity and partly because it did appear that broad categorizers might be more susceptible to learning our analytic concepts. This supposition makes particular sense if one remembers that a major thrust implicit in the Outline of Analytic Concepts is the opening up of expectancies--for example, accepting the broad range of frames of reference among people from different subcultures, recognizing the variety of value commitments within and among individuals in our society, accepting the notion that the probabilities of the truth of factual claims are best expressed not in the dichotomy of true or false, but in terms of a continuum of chance. It also seemed to make sense that the learning of new ideas generally might be related to the width of one's categories, i.e., to the breadth of conceptualization that could be handled by existent categories.

FIGURE 6

Brief Descriptions of Personality Measures Administered in the U.S.U. Project

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Cognitive Need and Flexibility

Resnick Need-Cognition Questionnaire: A high score indicates a predisposition toward cognitive activity.
Sample item: If some music comes on the radio that you like, but don't recognize exactly, are you likely to: (a) just sit back and enjoy it, or (b) try and figure out what it is, who might have written it, or who is performing?

Wesley Rigidity Scale: A high score indicates a need for orderliness and security.
Sample item: When I do homework, I check each problem at least twice.

Gough-Sanford Cognitive Rigidity Scale*: A high score indicates tenacity of individual beliefs.
Sample item: I am often the last to give up trying to do a thing.

Berlak School Work Habits Questionnaire (Need Structure): A high score is supposed to indicate a desire for structure and order in dealing with school and related tasks.
Sample item: I write down my homework assignments in all my subjects.

Anderson Need-Achievement Questionnaire: A high score indicates a desire to achieve.
Sample item: I would be very unhappy if I was not successful at something I had seriously started to do.

Dogmatism Scale*: A high score indicates closed, tenacious belief systems.
Sample item: Of all the different philosophies which exist in this world there is probably only one which is correct.

Category Width*: A high score indicates wide cognitive width or range.
Sample item: It has been estimated that the average width of windows is 34 inches. What do you think:

a. is the width of the widest window. . .
    1. 1,363 inches (3)[b]
    2. 341 inches (2)
    3. 48 inches (0)
    4. 81 inches (1)
b. is the width of the narrowest window. . .
    1. 3 inches (2)
    2. 18 inches (0)
    3. 11 inches (1)
    4. 1 inch (3)

Social Attitudes and Ideology

"Have" Questionnaire: A high score indicates belief that existing privileged groups should maintain their states.
Sample item: Poor people are always looking for a free handout.

FIGURE 6 CONTINUED

"Have-Not" Questionnaire: A high score indicates sympathy toward economically deprived groups.
Sample item: We should all give a lot more money to help the poor.

F-Scale: A measure of the tendency toward authoritarian solutions to basic social problems and interpersonal relations.
Sample item: It is only right for a person to feel that his country or religion is better than any other.

Personal and Socio-Emotional Traits

Guilford-Zimmerman Temperament Survey
- G-General Activity: a high score suggests a rapid pace of activities, high energy, liking for speed, quickness for action.
- R-Restraint: a high score suggests serious-mindedness, persistent effort, and self-control.
- A-Ascendance: a high score suggests leadership habits, speaking with individuals, non-submissiveness.
- S-Sociability: a high score suggests that the respondent has many friends, likes entering into conversations, likes social activities.
- E-Emotional Stability: a high score suggests evenness of moods, optimism, good composure.
- O-Objectivity: a high score suggests that the respondent is thick-skinned; that he is not hypersensitive, self-centered, or oversuspicious.
- F-Friendliness: a high score suggests a toleration for hostile action, and a tendency not to be belligerent, hostile, or dominating.
- T-Thoughtfulness: a high score suggests tolerance of people and faith in social institutions.
- M-Masculinity: a high score suggests interest in masculine activities and vocations, resistance to fear, and a tendency to be "hard-boiled."

Submissiveness Scale: A high score is supposed to indicate a tendency to conform to external authority.
Sample item: Children shouldn't have friends that their parents object to.

Facilitating Anxiety*: A high score indicates a tendency for the person to report that he performs better when anxious.
Sample item: In courses in which the total grade is based mainly on one exam, I seem to do better than other people.

Debilitating Anxiety*: A high score indicates a tendency to report that anxiety interferes with performance.
Sample item: In a course where I have been doing poorly, my fear of a bad grade cuts down my efficiency.

Taylor Manifest Anxiety Scale*: A high score indicates a generally high level of anxiety.
Sample item: At times I am so restless that I cannot sit in a chair for very long.

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*Measure not used in the Harvard Project.

Three measures of anxiety were administered because it seemed from experience that the adversarial, non-structured nature of the socratic discussion was threatening to some students, and the openness of the seminar discussion might be to others. To the extent that these discussions evoked anxiety, the amount of anxiety brought to the classroom by the student might be a potent variable. That is, for the student already carrying a burden of anxiety, or for whom anxiety interfered with performance, socratic or seminar teaching (as contrasted with the low threat, structured nature of recitation) might add to the anxiety to such an extent that learning would be impeded. The relationships between facilitating and debilitating anxiety (Alpert & Haber, 1960) and manifest anxiety, as measured by the Taylor Scale (Taylor, 1953), were also of interest, particularly as, based on the Taylor Scale, anxiety has usually been predicted to bear a curvilinear relationship to learning rather than the linear relationships presumed by the Facilitating and Debilitating Anxiety Scales.

The personality measures were administered in several settings during the fall of the year, immediately preceding the tryout of the project curricular materials. Reliability coefficients are presented in Table 14. Some of the coefficients are disappointingly low (e.g., for the Need-Cognition, Wesley Rigidity, Gough-Sanford Cognitive Rigidity, and the Need-Achievement Scales). It is interesting that the Need-Cognition, Wesley Rigidity, and Need Achievement Scale items were administered in one questionnaire toward the end of the personality testing sequence. It could be that a saturation with testing had affected the students test-taking motivation and, consequently, the stability of their responses. The reliability coefficients for the three tests were somewhat higher with the Harvard Project's eighth graders (r = .67, .60, and .63, respectively), although not a great deal so. In any event, most of the reliability coefficients are of acceptable magnitude for research, as opposed to diagnostic, tools.

TABLE 14

Reliability Coefficients* for Personality Variables

Cognitive Need and Flexibility		Social Attitudes and Ideology	
Resnick Need-Cognition	.55	"Have"	.85**
Wesley Rigidity	.55	"Have-Not"	.79**
Gough-Sanford Rigidity	.60	F-Scale	.67
Berlak School-Words Habits (Need Structure)	.69		
Anderson Need-Achievement	.39		
Word Description	.70		
Dogmatism	.74		
Category Width	.89		
Personal and Socio-Emotional Traits			
Guilford-Zimmerman		Submissiveness	.79
General Activity	.76	Facilitating Anxiety	.53
Restraint	.71	Debilitating Anxiety	.80
Ascendance	.81	Taylor Manifest Anxiety	.76
Sociability	.86		
Emotional Stability	.80		
Objectivity	.77		
Friendliness	.89		
Thoughtfulness	.69		
Personal Relations	.68		
Masculinity	.89		

*Unless otherwise indicated, all coefficients are split-half, corrected with the Spearman-Brown Prophecy Formula.

**Coefficient computed with the Kuder-Richardson Formula #21.

CHAPTER TWELVE

TEACHING STYLE, PERSONALITY, AND LEARNING

The research literature is replete with findings of "no significant differences" between teaching styles in their effect on student learning. In the Harvard Project (Oliver & Shaver, 1966), for example, the mean gains of students taught by recitation and socratic styles were compared on twelve measures, including tests of knowledge of history and government, standardized "critical thinking" tests, project-developed critical thinking tests, and measures of interest in public issues. The effect of style was not significant for any of the several measures.

The U.S.U. Project produced results very much in line with the previous history of teaching methods research, including the Harvard Project. It will be recalled that students were assigned to treatment randomly, so no pretesting was carried out on the assumption that pre-instruction differences would be randomly distributed among the groups. The data in Table 15 indicate that random assignment resulted in similar scores on the GATB subtests for students to be taught by the three styles, and one would expect comparable results on other tests.

TABLE 15
Comparison of Recitation, Seminar, and Socratic Groups on the General Aptitude Test Battery--G Factor, Verbal, and Clerical Abilities

GATB Subtest	Recitation Mean	Seminar Mean	Socratic Mean	F*
G-Factor	103.71	104.64	104.82	.12
Verbal	96.99	100.02	99.62	1.00
Clerical	101.16	101.39	103.77	.84

*With 2/204 d.f., none significant at the .05 level.

Differences among the mean scores of the recitation, seminar, and socratic groups on the various tests of learning were tested for significance using analysis of variance. Initially, three-way analyses were used, with students' scores on each dependent variable classified by style, teacher, and position in the lower, middle, or upper third of the personality variable being used in the analysis. Unfortunately, the thirds of the personality variable distributions frequently were not evenly distributed among the small teaching style-teacher groups, and cells turned up with one or no entries. In order to obtain adequate cell Ns, one basis of classification (teacher) was dropped and two-way analyses of variance run, teaching style by student personality. These analyses, of course, allowed us to test for the main effects of style and personality, as well as for the interaction of style and student personality.

The results of the tests for style effects can be summarized very easily: There was no significant difference among the teaching styles on any of the dependent variables. It will be remembered that the dependent variables included a standardized test of critical thinking (the Wagmis Test), two Harvard Project paper-and-pencil tests of critical thinking (SIAT No. 1 and No. 2), a measure of interest in social issues (the Headlines Test), two U.S.U. Project paper-and-pencil tests of knowledge (the Negro Unit Test and the Final Exam), the Total Valued Acts (TVA) in student discussions as scored with ACOS (Analytic Content Observation System), and student evaluations of the course. In short, style had no systematic effect discernible with the project's measures, design, and analysis.

Personality and Learning

Attempts to relate personality variables to learning have come up with many insignificant and many inconsistent findings. This history was noted in the report of the Harvard Project (Oliver & Shaver, 1962; 1966) and was confirmed in that project's findings. Along with the nonsignificant teaching style findings, the lack of productivity of personality-learning correlations led to the adoption of the analysis of teaching style student personality interactions as a research strategy for both the Harvard and U.S.U. Projects. However, before proceeding to a reporting of the style by student personality findings for the U.S.U. Project, a look at personality-learning measure correlations may be interesting.

Table 16 presents the intercorrelations for the various personality and dependent variables administered for the U.S.U. Project. As would be expected from previous findings, consistent correlations between learning and personality variables can be found only if one includes the ability scores from the GATB as measures of personality traits. Using a simple method of extracting factors (McQuitty, 1961), working from the highest coefficient in the matrix ($r = .78$ between GATB Factor G and GATB Verbal), there appears to be one factor which dominates the matrix. Not too surprisingly, it might be labeled "cognitive ability". Besides the GATB Factor G and Verbal scores, it includes (using $r = .30$ as a fairly nonrigorous criterion) GATB Clerical Ability, divergent and convergent thinking, facilitating anxiety and debilitating anxiety (negative loading), and the F-Scale. Debilitating anxiety also brings into the cluster dogmatism, manifest anxiety, submissiveness, and the objectivity and emotional stability factors from the Guilford-Zimmerman Temperament Survey. All of the paper-and-pencil tests of cognitive learning are included in the factor--SIAT No. 1 and No. 2, the Negro Unit Test, the Social Studies Final, and the Wagmis Test.

Interestingly, the ACOS Total Valued Acts score appears to bear little relationship to any of the variables in the factor (there is a coefficient of .29 for ACOS-TVA and convergent thinking scores) or, actually, in the matrix.

TABLE 16

Correlations Among Personality and Depe

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Sex																									
2. Convergent	13																								
3. Divergent	-04	48																							
4. Dogmatism	-04	19	-24																						
5. F-Scale	-03	-30	-20	63																					
6. Category Width	21	12	06	07	-01																				
7. SIAT #1	-05	49	35	-20	-29	10																			
8. SIAT #2	-18	37	45	-11	-15	10	65																		
9. Headlines	-06	-01	-06	-38	-04	-11	-01	-09																	
10. N Achievement	-02	04	-01	20	14	-03	12	18	-06																
11. N Cognition	-13	18	29	-02	-01	04	20	25	07	31															
12. Wesley	12	-08	-19	17	18	01	-06	-01	04	-01	02														
13. N Structure	-24	-03	-00	03	12	-06	00	11	04	22	37	15													
14. Gough-Sanford	-07	-18	-20	29	38	04	-12	-06	11	28	22	32	57												
15. Facilitating	10	20	23	-10	-07	10	19	20	-03	20	27	06	18	16											
16. Debilitating	-14	-33	-29	31	31	02	-28	-22	11	05	-15	-02	03	23	-49										
17. Manifest	-16	-14	-11	26	24	05	-04	09	05	07	02	00	-08	03	-24	40									
18. Submissiveness	-10	-27	-06	40	54	-08	-21	-05	07	16	09	29	30	48	03	30	16								
19. Have	12	05	-06	17	10	05	-13	-11	-12	01	-08	11	-05	-01	02	00	02	08							
20. Have Not	11	13	06	-26	-20	05	12	08	12	-01	-03	01	-10	-11	01	-19	-14	-29	07						
21. Word Descrip	-09	-12	-04	-01	-03	09	-07	-04	01	-06	-00	-07	-13	-11	-10	-03	08	01	01	-06					
22. GATB-G	-03	63	54	-17	-29	15	57	50	-16	01	26	-09	05	-10	40	-39	-14	-20	08	12	-06				
23. GATB Verbal	-20	55	55	-25	-37	68	60	50	-13	16	29	-17	08	-16	36	-43	-15	-27	-04	11	-02	78			

*Items scored in reverse (i.e., the lower the score, the higher the evaluation), so a negat

TABLE 16

Among Personality and Dependent Variables

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
16																										
02	08																									
-14	-29	07																								
08	01	01	-06																							
-14	-20	08	12	-06																						
-15	-27	-04	11	-02	78																					

e evaluation), so a negative sign actually indicates a positive relationship.

TABLE 16

Correlations Among Personality and Depende

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
24. GATB Clerical	-31	21	24	-11	-13	-06	29	33	-05	20	20	-10	08	00	23	-13	-02	-01	04	03	-05	47	46			
25. G-Z G	-07	09	06	-04	-00	-16	-00	-02	-04	22	10	-01	17	17	18	-09	-16	04	13	02	-00	18	20	22		
26. R	-09	09	14	11	03	13	20	28	03	22	34	18	34	17	06	-11	12	23	-05	02	-05	11	13	08	-14	
27. A	18	18	05	-12	-21	-16	05	-03	11	11	07	-09	08	-04	21	-18	-17	-24	06	08	06	15	20	05	39	-23
28. S	-15	05	-05	-17	-21	-15	-03	-03	04	14	01	-10	19	07	11	-11	-28	-14	-02	12	-02	05	16	13	53	-24
29. E	17	10	-03	-09	-12	-13	01	-06	-00	-01	06	25	17	06	21	-37	-59	04	-03	08	-05	09	07	05	30	24
30. O	07	18	19	-27	-18	-12	16	15	14	-07	17	05	20	-05	18	-33	-47	05	-23	03	-07	11	14	03	03	19
31. F	-27	-08	19	-14	-15	05	27	33	-20	-01	28	09	24	06	-01	-17	00	16	-20	11	03	13	14	07	-15	53
32. T	-09	14	10	04	06	13	17	06	07	19	22	-10	17	14	07	04	21	00	09	-08	-02	13	15	02	04	18
33. P	-18	18	15	-15	-13	-03	08	08	-02	01	25	09	20	16	14	-19	-18	12	-18	00	-01	12	17	16	13	32
34. M	84	19	-02	-10	-13	11	-06	-17	04	-03	-08	10	-26	-12	16	-24	-27	-20	07	14	-09	05	-09	-24	02	-13
35. Wagmis Total	-15	41	46	-17	-19	12	62	66	02	05	26	-04	06	-06	21	-25	03	-11	-11	15	-02	47	53	29	04	18
36. Negro-A	-13	37	50	-23	-17	03	58	65	-01	12	35	03	15	-05	28	-30	02	01	-14	07	13	53	64	32	02	29
37. Negro-B	-14	18	25	-13	-16	-12	51	47	01	21	18	-12	01	-15	13	-24	18	-03	-15	-02	03	29	43	30	02	29
38. Negro-Total	-16	33	46	-20	-25	-05	60	63	-01	13	30	-08	04	-15	26	-39	10	-06	-18	09	18	50	62	36	01	28
39. Final Exam	-10	45	42	-17	-33	19	58	60	-08	07	18	-09	-01	-13	17	-25	-04	-12	-02	09	-09	57	51	31	-08	19
40. Evaluation Total*	07	-06	-04	10	-05	-04	-17	-14	-07	-27	-28	02	-13	-17	-25	-00	-08	-15	10	-01	-12	-07	-08	-06	-05	-04
41. Overall Rating Item*	11	-11	-04	00	-04	-00	-13	-11	-15	-21	-28	04	-03	-11	-06	-09	-10	-17	-06	-05	-09	-09	-09	-11	-09	02
42. History-POD Comparison	04	-18	-16	-03	-01	-05	-22	-22	-10	-16	-15	-05	01	-10	-18	03	-07	-13	08	-07	-02	-21	-14	-07	08	-12
43. ACOS-Total Valued Acts	08	29	11	-02	-11	06	18	11	-01	06	09	-16	-11	-14	22	-13	-04	-18	07	12	16	17	22	-05	06	-02

*Items scored in reverse (i.e., the lower the score, the higher the evaluation), so a negative s

TABLE 16

ong Personality and Dependent Variables (Cont'd)

7	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
2	-01	04	03	-05	47	46																				
6	04	13	02	-00	18	20	22																			
2	23	-05	02	-05	11	13	08	-14																		
7	-24	06	08	06	15	20	05	39	-23																	
8	-14	-02	12	-02	05	16	13	53	-24	53																
9	04	-03	08	-05	09	07	05	30	24	27	39															
7	05	-23	03	-07	11	14	03	03	19	13	22	61														
0	16	-20	11	03	13	14	07	-15	53	-31	-07	12	49													
1	00	09	-08	-02	13	15	02	04	18	15	-06	-29	-24	-12												
8	12	-18	00	-01	12	17	16	13	32	-11	21	25	41	50	01											
7	-20	07	14	-09	05	-09	-24	02	-13	28	-04	31	21	-23	-14	-13										
3	-11	-11	15	-02	47	53	29	04	18	02	-05	-15	10	24	05	09	-15	15								
2	01	-14	07	13	53	64	32	02	29	-02	-05	00	26	35	15	18	-11	58								
8	-03	-15	-02	03	29	43	30	02	29	02	-00	00	13	20	09	11	-10	48	55							
0	-06	-18	09	18	50	62	36	01	28	03	02	01	20	35	14	19	-10	62	93	81						
4	-12	-02	09	-09	57	51	31	-08	[illegible]	[illegible]	-08	-03	06	23	10	08	-09	48	53	48	61					
8	-15	10	-01	-12	-07	-08	-06	-05	-04	12	-01	11	01	-14	-04	-02	19	-20	-32	-12	-25	-10				
0	-17	-06	-05	-09	-09	-09	-11	-09	02	00	-11	06	01	-06	-07	-02	16	-10	-26	-09	-22	-10	75			
7	-13	08	-07	-02	-21	-14	-07	08	-12	06	-19	08	-03	-23	-13	-06	09	-12	-39	-15	-34	-29	55	49		
4	-18	07	12	16	17	22	-05	06	-02	24	14	-01	-04	-04	08	-14	10	09	08	11	09	21	-19	-22	-16	

evaluation), so a negative sign actually indicates a positive relationship.

Nor is the Headlines Test included in the factor. Interest as measured by the Headlines Test is related only to the F-Scale ($r = -.38$); the more authoritarian the student, the less likely he was to be interested in public issues after treatment. Also of interest is the status of the Need-Cognition Test. Contrary to what one would expect, it is brought into the factor only indirectly via a low relationship with scores on the Negro Unit Test. This raises considerable question about its validity (at least without looking at Table 17).

The coefficients reported in Table 16 are, of course, Pearson product-moment correlation coefficients. To the extent that any of the relationships were not linear, these coefficients, based on the assumption of linearity, would be constrained. Table 17 contains a summary of the various significant mean differences on the dependent variables among the low, medium, and high personality groupings. As one would expect, where the correlations are high as reported in Table 16, the means of the personality groups are significantly different and show a linear trend. It also seems obvious that the lack of linearity depressed correlations in several instances, even though in some cases the coefficients are still quite high. (For example, debilitating anxiety and Negro Unit Test--Total scores have an $r = -.39$.) As a matter of fact, debilitating anxiety scores show a consistency of correlation with learning variables that is quite remarkable given the lack of linear trends in the means for the personality groupings. However, variables such as category width and the Guilford-Zimmerman Personal Relations Factor, which are involved in several significant nonlinear differences among means, also have low correlation coefficients for the same measures (from .05 to .21). Clearly, one is going to get a limited picture of personality-dependent variable relationships looking at a table of coefficients based on an assumption of linearity of relationship. For example, the amount of variability in learning that might be explained by variables such as category width, facilitating and debilitating anxiety, Guilford-Zimmerman Restraint and Personal Relations would not be evident from a table of Pearson product-moment coefficients.

A couple of "side comments" about Tables 16 and 17 are in order. First, the reader may wonder why Subtests A and B of the Negro Unit Test have been included in the tables, even though reliability figures were not reported for them. It will be recalled that Subtest A was administered in the middle of the treatment period, while Subtest B was administered at the end. This difference of time of administration *vis a vis* the treatment was the reason for analyzing the two subtest scores as well as the Negro Unit Test--Total score. It seemed reasonable to expect that teaching style and student personality interaction would be more likely to have an effect the longer the period of treatment. Hence, such interactions should be more evident with Subtest B than with Subtest A. There was an interesting difference in correlations for the two subtests. Subtest A has a considerably larger number of high correlations with personality variables than does Subtest B. The higher correlations between Subtest A and personality variables may, in fact, reflect the lesser exposure to treatment. That is, with less instruction and discussion on the problems of racial segregation, personality factors would be "freer" to operate in affecting learning; instruction may tend to level out the effects of personality. Of course, the differences in numbers of correlations may be no more than an artifact of the types of materials studied and the questions asked on the tests.

TABLE 17

Dependent Variables with Significant (P<.05) Differences
Among Means for Low, Medium, and High Personality Groupings

			Personality Groupings						
			Low		Medium		High		
Personality Variable	Dependent Variable	r	N	Mean	N	Mean	N	Mean	F
Convergent Thinking	SIAT No. 1	.49	47	7.02	69	9.25	63	11.48	24.07
	SIAT No. 2	.37	44	44.95	64	50.75	61	53.05	14.50
	Wagmis	.41	54	34.48	69	39.27	65	41.61	13.68
	Negro Test--A	.37	40	16.57	52	19.21	48	21.35	15.11
	Negro Test--B	.18	29	10.17	58	11.15	54	11.59	5.23
	Negro Test--Total	.33	29	27.59	45	30.80	39	33.46	10.66
	Final Exam	.45	48	32.75	67	37.73	64	39.31	21.46
	History Comp.* **	.18	66	2.89	47	2.27	47	2.38	6.04
	ACOS-TVA	.29	52	7.19	47	10.16	53	15.19	3.45
Divergent Thinking	SIAT No. 1	.35	51	7.57	62	9.85	62	10.55	9.57
	SIAT No. 2	.45	45	44.64	56	50.20	63	53.82	14.50
	Wagmis	.46	55	33.84	63	39.43	65	41.69	16.47
	Negro Test--A	.50	37	16.32	50	19.48	48	21.56	17.76
	Negro Test--B	.25	36	10.11	51	10.67	51	12.10	5.47
	Negro Test--Total	.46	30	27.53	41	29.78	39	34.64	13.68
	Final Exam	.42	49	33.16	63	37.59	64	39.22	15.73
F-Scale	SIAT No. 1	-.29	63	10.63	62	9.43	52	8.04	6.49
	Final Exam	-.33	63	38.95	61	37.10	52	34.44	7.98
Category Width	SIAT No. 2*	.10	57	49.26	50	47.34	61	52.49	4.36
	Wagmis*	.12	62	38.24	60	36.27	66	41.01	4.76
	Negro Test--B	-.12	47	11.81	42	10.33	50	11.16	3.32
	Negro Test--Total	-.05	40	31.90	32	28.53	39	31.79	3.64
	Final Exam	.19	59	35.25	58	36.17	61	39.29	7.00
N-Achievement	SIAT No. 2	.18	55	46.84	55	50.95	60	52.04	4.34
	Eval. Total**	-.27	65	22.81	48	21.50	60	20.17	3.35
N-Cognition	SIAT No. 1	.20	56	8.64	54	9.25	60	10.43	4.21
	SIAT No. 2	.25	51	47.12	60	49.70	59	52.71	5.51
	Wagmis	.26	59	35.73	67	38.64	64	41.31	7.61
	Negro Test--A	.35	44	17.07	49	19.43	47	20.98	8.28
	Negro Test--Total	.30	37	28.13	40	31.62	35	32.94	5.06
	Final Exam*	.18	57	36.60	64	35.33	59	39.05	5.11
	Eval. Total**	-.28	65	23.44	48	20.90	60	20.32	6.53
	Over. Rating**	-.28	65	2.93	48	2.56	60	2.42	4.91
N-Structure	Eval. Total**	-.13	65	23.17	48	20.87	59	20.62	4.06
Gough-Sanford	Final Exam	-.13	54	38.22	55	37.25	62	35.31	3.14
	Eval. Total* **	-.17	62	22.23	45	22.27	58	20.10	3.05
	Overall Rat. Item**	-.11	53	2.85	55	2.67	58	2.22	5.41

TABLE 17 CONTINUED

Personality Variable	Dependent Variable	r	Personality Groupings Low N	Low Mean	Medium N	Medium Mean	High N	High Mean	F
Facilitating Anxiety	SIAT No. 1	.19	39	8.20	75	9.43	51	10.86	6.54
	SIAT No. 2	.20	45	46.33	69	50.71	52	52.86	7.38
	Wagmis	.21	50	36.20	78	38.46	56	41.18	5.69
	Negro Test--A	.28	34	17.09	62	19.66	40	20.50	5.07
	Final Exam	.17	59	35.02	74	37.70	52	37.96	3.62
	History Comp.*	-.18	62	2.81	47	2.34	59	2.33	3.93
	ACOS-TVA	.22	49	7.01	48	12.90	52	14.50	4.35
Debilitating Anxiety	SIAT No. 1	-.28	60	11.23	61	8.72	54	8.49	8.97
	SIAT No. 2*	-.22	58	53.38	59	48.52	49	48.45	5.05
	Wagmis*	-.25	66	41.68	63	37.11	55	36.89	6.28
	Negro Test--A*	-.30	50	21.56	48	17.69	38	18.24	9.23
	Negro Test--B*	-.24	48	12.19	47	10.25	44	10.95	5.50
	Negro Test--Total*	-.39	40	34.72	36	28.03	35	29.57	12.63
Submissiveness	SIAT No. 1	-.21	64	10.58	56	9.30	59	8.36	4.87
	History Comp.**	-.13	65	2.80	48	2.68	59	2.37	3.24
Word Descrip.	Eval. Total* **	-.12	65	23.00	48	19.75	58	21.63	5.60
G-Z Ascendance	ACOS-TVA*	.24	49	10.16	47	8.76	48	15.09	3.34
G-Z Restraint	SIAT No. 1*	.20	44	9.02	67	8.78	56	10.77	3.60
	SIAT No. 2	.28	41	47.32	62	48.61	55	53.91	6.00
	Wagmis*	.18	47	37.89	68	37.63	60	41.35	3.10
	Negro Test--A	.29	34	17.73	49	18.86	50	20.82	4.25
	Negro Test--B	.29	30	10.03	63	10.94	52	12.04	4.84
	Final Exam*	.19	48	36.35	64	36.03	56	39.21	4.90
G-Z Objectivity	Headlines*	.14	41	56.58	58	54.76	60	58.57	3.50
	Negro Test--A	.26	37	18.08	49	18.64	48	20.92	3.41
G-Z Friendliness	SIAT No. 1	.27	53	8.20	58	9.31	55	10.84	6.66
	SIAT No. 2	.33	47	47.21	55	48.49	55	53.98	7.00
	Wagmis	.24	53	37.19	61	38.18	60	40.91	3.18
	Negro Test--A	.35	36	17.55	47	18.47	49	21.31	7.22
	Negro Test--Total*	.35	26	29.31	39	29.18	43	33.72	5.03
	History Comp.**	-.23	62	2.73	47	2.51	52	2.25	3.21
G-Z Thoughtfulness	ACOS-TVA	.08	37	8.82	48	11.40	41	15.09	3.16
G-Z Personal Relations	SIAT No. 1*	.08	49	9.55	68	8.57	50	10.74	4.74
	SIAT No. 2*	.08	46	49.67	68	48.56	44	53.00	3.32
	Negro Test--A*	.18	38	19.08	56	18.07	39	21.31	5.39
	Negro Test--Total*	.19	18	30.64	47	29.34	33	33.73	3.79
	ACOS-TVA*	-.14	35	15.39	48	8.52	44	11.19	3.62

*Obviously not a linear increase in the dependent variable means for the low to medium to high personality groupings.

**Ratings scored so that the lower the score the higher the rating.

Also, for people especially interested in the analysis of the content of student discussions as a means of assessing learning, there are some interesting findings in Table 17. For example, the signficant difference among ACOS-Total Valued Act means for the low, medium, and high convergent thinking groups (r = .25), coupled with the absence of such differences for divergent thinking, confirms what may seem obvious. "Good" performance in discussions of public issues, as assessed with ACOS, involved the ability to bring to bear the analytic concepts taught in class rather than the ability to come up with new analytic tools. Or, put another way, ACOS obviously does not provide for the scoring of unique approaches to handling the issues presented by the cases being discussed.

It is interesting, too, that facilitating anxiety was significantly related to performance as assessed by ACOS, although debilitating anxiety was not. There may be something to the claim that removing the need to translate one's thoughts via paper-and-pencil frequently reduces anxiety. Or, perhaps in the jargon of the behaviorist, this finding simply reflects the fact that paper-and-pencil tests have taken on a stimulus value which oral discussion has not. Perhaps with continued use of oral discussion as a means of assigning grades, performance there would also be more strongly related to debilitating anxiety.

The Harvard Project report indicated that SIAT No. 4 scores from the socratic interview were correlated with the Guilford-Zimmerman factor of ascendance and the trait of persistence on the High School Personality Questionnaire, indicating that performance in such situations may well depend on factors other than intellectual training. Unfortunately, individual scores were not available for the SIAT No. 4 as applied to group discussions. However, the finding in Table 17 that ACOS Total Valued Act scores are, on the average, considerably higher for those low on the Guilford-Zimmerman Personal Relations Factor than for those medium or high on the factor fits with the findings for SIAT No. 4. The person more hypercritical and less tolerant in his relations with others is more likely to do well in the discussion setting--perhaps because he is more willing to speak out regardless of the thoughts or feelings expressed by the other participants. In fact, he may be more willing (or eager) to criticize those thoughts and feelings, and one aspect of assessment of learning of the concepts in the Outline is the student's ability to challenge claims by others.

Another indication that factors other than intellectual training operate to affect discussion performance as assessed by ACOS is the relationship between GATB--Verbal scores and ACOS Total Valued Acts scores. Although the coefficient (see Table 16) is only .22, the difference among ACOS Total Valued Act mean scores for students low, medium, and high on GATB-Verbal is significant beyond the .05 level (F = 4.16). (The difference among low, medium, and high GATB-G Factor groups was not significant.) A look at the ACOS-TVA means for the three GATB-Verbal groups (low = 7.42, medium = 12.10, and high = 14.87) indicates that the student with low verbal ability is considerably hampered in his discussion performance, a finding that should surprise no one.

It is also interesting to note the striking differences between the means of those low and high on thoughtfulness as measured by the Guilford-Zimmerman Survey. It is comforting that reflectiveness, meditativeness, and philosophical inclination--if indeed the F-Z Factor T does measure these (Guilford & Zimmerman, 1949)--are related to the tendency to apply our analytic concepts in discussions.

Teaching Style-Student Personality Interactions

As already noted, in both the Harvard Project and the U.S.U. Project, the failure to produce significant teaching style effects and the lack of relationships between personality measures (other than measures of cognitive ability) and performance on the dependent variables led to the use of a research design in which analysis of variance could be used to test for interactions between student personality and teaching style in affecting learning. Use of this type of design as a research strategy was based on the supposition

> . . .that teaching methods affect different students differently. Students who profit from one method may do poorly in another, while other students may do poorly in the first method and well in the second. When we average them together we find little overall difference between methods and no overall effect of a single motivational measure. (McKeachie, 1961, pp. 111-112)

Students' scores on the dependent variables were classified according to the discussion style (recitation, seminar, or socratic) to which the student had been exposed and according to whether he fell into the low, middle, or high third of the personality variable being used in the particular analysis. It will be recalled that this same design (except using only two styles--recitation and socratic) produced few significant interactions in the Harvard Project. In fact, twelve interaction terms out of ninety-one analyses were significant at the .05 level. This finding hardly confirmed the rationale presented in the quote from McKeachie above. Part of the purpose of the U.S.U. Project was a systematic replication of the Harvard Project to determine if a greater number of interactions would emerge.

Four hundred and five two-way analyses of variance were computed for the U.S.U. Project. Scores on fifteen dependent variables were analyzed utilizing twenty-seven personality variables to get at teaching style-student personality interactions (see Chapter 11 for descriptions of the variables). Table 18 presents a summary of the results. Sixteen interaction terms were significant. At the .05 level of significance which was adopted for this study, one would expect about twenty interactions to be significant by chance (i.e., 405 times .05). Moreover, there is a lack of correspondence between the significant interactions for the Harvard Project (Table 1) and those for the U.S.U. Project. Therefore, it is difficult to put much credence on the results; interpretation would appear to be a dubious venture. Nevertheless, Tables 19 through 34 present summaries of the analyses for the significant interaction terms, and we will make a few comments about the findings--particularly about consistencies that appear to be there.

Tables 19 through 23 contain the results for those personality variables which were involved in only one significant interaction. The significant interaction term for Table 19 seems to be due in particular to the ineffectiveness of the seminar style with students low in convergent thinking and the

TABLE 18

Summary of Significant (P<.05) Interactions Between Teaching Style and Student Personality in Affecting Dependent Variable Scores

Personality Measures	*Dependent Variables*									
	Wagmis 1	Wagmis 2	Final Exam	Negro Subtest A	Negro Subtest B	Negro Test Total	ACOS-TVA	Eval. Total	Overall Rating Item	Hist.-POD Comp.
Convergent Thinking					X					
Need Achievement		X								
Wesley Rigidity						X				
Facilitating Anxiety									X	
Debilitating Anxiety								X		
Guilford-Zimmerman Emotional Stability					X	X				
Thoughtfulness	X		X				X	X	X	X
GATB-G Factor				X		X		X		

TABLE 19

Summary of Analysis of Variance for Negro Unit Test--Subtest B, Teaching Style by Convergent Thinking

	Convergent Thinking Means			
Style	Low	Medium	High	Pooled
Recitation	10.83	11.27	11.00	11.04
Seminar	7.25	11.16	12.29	11.25
Socratic	10.46	11.08	11.67	11.10
Pooled	10.17	11.15	11.59	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	16.25	8.12	.93
Personality	2	91.50	45.75	5.23*
S X P	4	88.27	22.07	2.52**
Error	132	1153.80	8.74	

*p<.01

**p<.05

style's relatively greater effectiveness with high divergent thinking students. This finding would make sense if the Negro Unit Test measured the students' ability to apply the analytic concepts which were the focus of the curriculum, but has little meaning on a test that largely demanded factual recall.

The seminar style also seems largely responsible for the significant interaction in Table 20. Again, there is a curvilinear relationship between performance on the dependent variable (Wagmis 2--Recognition of Assumptions) and the personality measure (Need-Achievement) for seminar students. Those low or high on N-Achievement did relatively better in seminar discussions. High N-Achievement students also did less well on Wagmis 2 if taught by the recitation style.

TABLE 20

Summary of Analysis of Variance for Wagmis 2 (Recognition of Assumptions), Teaching Style by Need Achievement

		Need Achievement Group Means		
Style	Low	Medium	High	Pooled
Recitation	8.18	9.77	7.60	8.72
Seminar	10.04	7.60	9.87	8.78
Socratic	8.37	9.33	8.64	9.34
Pooled	9.02	9.14	8.68	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	12.99	6.49	.68
Personality	2	1.30	.65	.07
S X P	4	133.07	33.27	3.50*
Error	182	1728.45	9.50	

*p<.01

In Table 21, we see that students low on the Wesley Rigidity Scale did well on the Negro Unit Test--Total if in seminar discussions, but those high on the scale did relatively poorly if in the seminar; the relationship was reversed for the socratic style. These findings seem to make little sense. In fact, the opposite result might have been anticipated: Students high in rigidity might have done well in the nonstructured seminar because they would impose structure on the task; those high on rigidity should also have been somewhat more threatened by the socratic dialogue, depressing learning rather than enhancing it.

The results with the facilitating anxiety measure and the item on the evaluation form asking for an overall rating of the course make some sense (Table 22). Those low in facilitating anxiety rated the course higher if in a seminar group and lower if in a recitation group; those in the medium anxiety group tended to rate the course higher if they were in the seminar

TABLE 21

Summary of Analysis of Variance for Negro Unit Test--Total, Teaching Style by Wesley Rigidity Scale

	Wesley Rigidity Scale Group Means			
Style	Low	Medium	High	Pooled
Recitation	30.91	32.87	29.20	31.00
Seminar	35.17	30.86	27.60	30.63
Socratic	28.60	29.69	36.17	30.95
Pooled	31.00	31.21	30.49	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	9.38	4.69	.11
Personality	2	44.89	22.45	.51
S X P	4	486.29	121.57	2.74*
Error	103	4563.67	44.31	

*p<.05

group; and, there was a marked tendency for those high on facilitating anxiety to give the course a relatively higher rating if in socratic discussions. The lack of structure in the seminar may be uncomfortable to one low in facilitating anxiety, but the programmed, predictable nature of the recitation should arouse little anxiety; on the other hand, the person who seems himself as functioning well under pressure might well be expected to react positively to the low structure, high threat intensity of the socratic dialogue.

It is interesting that the results with the debilitating anxiety measure and the sum of the eight items on the course evaluation form (Table 23) mirror the results with the facilitating anxiety measure for the low group. Those low on debilitating anxiety tended to rate the course higher if they were in seminar discussions, but lower than expected if they were in recitation discussions. The same reversal from the facilitating anxiety findings is evident for the medium debilitating students, but not for those high debilitating students who were in socratic groups.

TABLE 22

Summary of Analysis of Variance for Overall Rating Item*, Teaching Style by Facilitating Anxiety

Style	Facilitating Anxiety Group Means Low	 Medium	 High	 Pooled
Recitation	2.40	2.84	2.68	2.68
Seminar	2.92	2.33	2.69	2.60
Socratic	2.63	2.85	2.00	2.59
Pooled	2.64	2.70	2.50	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	.79	.39	.47
Personality	2	1.47	.74	.87
S X P	4	10.07	2.52	2.99**
Error	159	133.92	.84	

*Item scored in reverse order, so the lower the mean, the higher the evaluation.

**p<.05.

As one would expect, the interaction pattern between teaching style and the Guilford-Zimmerman Emotional Stability Factor was similar for the Negro Unit Test--Subtest B and the Negro Unit Test--Total (Tables 24 and 25). In both cases, those low on the emotional stability scale did better on the Unit Test if taught in recitation or seminar, as compared to socratic groups, while those in the medium personality grouping did relatively less well in the recitation group and those in the high emotional stability group did less well if taught by the seminar style. The one striking difference between the two tables is the high mean on the Unit Test--Total produced by the interaction between socratic teaching and high emotional stability. Those high on stability did considerably better on the Unit Test--Total when taught by the socratic style. This finding should not be too surprising, given the adversarial, challenging nature of the socratic style. Again, we should remember that, with only sixteen significant interaction terms, these may be chance findings.

TABLE 23

Summary of Analysis of Variance for Total of Eight Evaluation Items*, Teaching Style by Debilitating Anxiety

	Debilitating Anxiety Group Means			
Style	Low	Medium	High	Pooled
Recitation	24.85	20.37	21.20	22.02
Seminar	19.59	22.69	22.29	21.45
Socratic	21.46	21.06	20.37	21.00
Pooled	22.05	21.19	20.37	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	37.16	18.58	.69
Personality	2	14.60	7.30	.27
S X P	4	301.02	75.55	2.81**
Error	159	4256.99	26.77	

*Items scored in reverse, so the lower the mean the higher the evaluation.

**$p<.05$.

TABLE 24

Summary of Analysis of Variance for Negro Unit Test--Subtest B, Teaching Style by Guilford-Zimmerman Emotional Stability

Style	G-Z Emotional Stability Group Means Low	Medium	High	Pooled
Recitation	12.00	9.76	11.50	11.02
Seminar	12.10	11.44	10.33	11.19
Socratic	10.06	12.13	11.75	11.27
Pooled	11.24	11.20	11.06	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	1.36	.68	.08
Personality	2	1.75	.87	.10
S X P	4	97.67	24.42	2.80*
Error	126	1098.40	8.71	

*p<.05

TABLE 25

Summary of Analysis of Variance for Negro Unit Test--Total,
Teaching Style by Guilford-Zimmerman Emotional Stability

	G-Z Emotional Stability Group Means			
Style	Low	Medium	High	Pooled
Recitation	32.23	29.15	31.50	30.97
Seminar	34.12	31.61	26.11	30.63
Socratic	28.00	30.46	36.00	31.37
Pooled	31.06	30.41	31.66	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	13.46	6.73	.16
Personality	2	20.72	10.36	.25
S X P	4	818.96	204.74	4.96*
Error	99	4087.58	41.29	

*p<.01

The thoughtfulness factor on the Guilford-Zimmerman Temperament Survey was involved in six significant interactions. In three of these, a measure of learning was the dependent variable (Tables 26, 27, and 28) and in three, rating of the course was the dependent variable (Tables 29, 30, 31). The three learning measures were the Wagmis 1 (Inference) Test, the Final Exam, and the ACOS-Total Valued Acts. The one consistency throughout was that those low on thoughtfulness did less well if taught by the socratic style. Other than that, the significant interactions terms are reflected in several different ways. With the Wagmis 1, students low on the thoughtfulness scale did relatively well when taught by the recitation method, while those in the medium group did better with socratic teaching than with either recitation or seminar, and those in the high group did better when exposed to the seminar treatment. On the Final Exam, the most obvious indication of interaction, other than the tendency, already noted, for low thoughtfulness students to do less well when taught by the socratic style was the relatively greater impact of socratic teaching for students high on the thoughtfulness factor. With the ACOS-TVA there was a potpourri of interactions. Those low on thoughtfulness did less well with both recitation and socratic teaching; those in the medium grouping

TABLE 26

Summary of Analysis of Variance for Wagmis 1 (Inference), Teaching Style by Guilford-Zimmerman Thoughtfulness

Style	G-Z Thoughtfulness Group Means Low	Medium	High	Pooled
Recitation	10.56	8.60	9.90	9.73
Seminar	9.26	8.89	11.00	9.65
Socratic	8.73	10.50	9.86	9.93
Pooled	9.72	9.44	10.19	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	.02	.01	.001
Personality	2	26.45	13.22	1.72
S X P	4	87.24	21.81	2.83*
Error	167	1287.00	7.71	

*p<.05

did extremely well with recitation teaching, less well with socratic, and relatively poorly with seminar teaching; with the high thoughtfulness groups, seminar teaching (as with Wagmis 1) in particular had an impact on ACOS-TVA scores.

Thoughtfulness, as measured by the Guilford-Zimmerman Survey, appears to have interacted with teaching style in affecting the three ratings of the course. Remembering that a *high score indicates a low rating,* we find the findings with the learning measures reflected in the rating results. Those low on thoughtfulness and in socratic groups tended to give the course a lower rating than would be expected in light of the marginal means (Tables 29, 30, and 31). In addition, those high on thoughtfulness tended to see the course in a more positive light when exposed to socratic teaching. There was also a tendency on the two rating variables (Tables 29 and 30) which got at an overall evaluation of the course for high thoughtfulness students to give less positive ratings when they were in recitation teaching groups, and for low thoughtfulness students to report more positive reactions to the course when

TABLE 27

Summary of Analysis of Variance for Final Exam,
Teaching Style by Guilford-Zimmerman Thoughtfulness

Style	G-Z Thoughtfulness Group Means Low	 Medium	 High	 Pooled
Recitation	37.68	37.26	38.26	37.73
Seminar	37.67	36.50	36.20	36.82
Socratic	32.09	37.46	38.90	36.93
Pooled	36.47	37.13	37.93	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	67.84	33.92	1.00
Personality	2	106.47	53.23	1.56
S X P	4	380.11	95.03	2.79*
Error	159	5480.23	34.01	

*p<.05

TABLE 28

Summary of Analysis of Variance for ACOS-TVA, Teaching Style by Guilford-Zimmerman Thoughtfulness

Style	G-Z Thoughtfulness Group Means Low	Medium	High	Pooled
Recitation	8.55	23.54	8.59	12.85
Seminar	9.50	7.50	14.82	10.70
Socratic	8.00	12.92	8.26	10.65
Pooled	8.87	14.04	10.58	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	321.57	160.78	1.10
Personality	2	763.13	381.56	2.62
S X P	4	2064,24	516.06	3.54*
Error	117	19671.00	145.71	

*p<.01

TABLE 29

Summary of Analysis of Variance for Total of Eight Evaluation Items*, Teaching Style by Guilford-Zimmerman Thoughtfulness

	G-Z Thoughtfulness Group Means			
Style	Low	Medium	High	Pooled
Recitation	19.68	22.62	23.68	21.90
Seminar	22.87	21.10	20.69	21.55
Socratic	25.50	21.00	19.32	21.24
Pooled	21.94	21.56	21.29	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	5.70	2.85	.11
Personality	2	57.96	28.98	1.11
S X P	4	474.21	118.55	4.53**
Error	153	4002.73	26.16	

*Items scored in reverse, so the lower the mean the higher the evaluation.

**p<.01.

TABLE 30

Summary of Analysis of Variance for Overall Rating Item*, Teaching Style by Guilford-Zimmerman Thoughtfulness

Style	Low	G-Z Thoughtfulness Group Means Medium	High	Pooled
Recitation	2.45	2.57	3.05	2.68
Seminar	2.80	2.53	2.54	2.62
Socratic	3.50	2.42	2.47	2.64
Pooled	2.79	2.50	2.71	
Source of Variance	d.f.	S.S.	M.S.	F
Style	2	.78	.39	.45
Personality	2	4.32	2.16	2.48
S X P	4	12.33	3.08	3.54**
Error	153	132.98	.87	

*Items scored in reverse, so the lower the mean the higher the evaluation.

**$p<.01$.

TABLE 31

Summary of Analysis of Variance for American History-POD Comparison Item*, Teaching Style by Guilford-Zimmerman Thoughtfulness

	G-Z Thoughtfulness Group Means			
Style	Low	Medium	High	Pooled
Recitation	2.36	2.71	2.37	2.48
Seminar	2.53	2.37	2.69	2.51
Socratic	3.20	2.46	2.00	2.43
Pooled	2.60	2.52	2.31	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	.13	.07	.07
Personality	2	3.01	1.50	1.49
S X P	4	11.54	2.88	2.86**
Error	153	154.28	1.00	

*Items scored in reverse, so the lower the mean the higher the evaluation.

**p<.05.

they were in recitation groups. These findings certainly are consistent with the notion that a thoughtful person would be stimulated by the socratic technique and perhaps somewhat bored by the programmed regularity and predictability of the recitation. It is also of considerable interest that a measure of intellectual orientation would be involved in the greatest number of teaching style-student personality interactions in a course primarily focused on improving the students' intellectual capacities.

The findings with the G-Z Thoughtfulness Factor are to some extent corroborated by the findings with the GATB Factor G (Tables 32, 33, and 34). Here we find students taught with the socratic style doing less well if they were in the low GATB Factor G grouping and relatively better, in terms of more positive ratings of the course, if they were in the high grouping. This confirmation of the thoughtfulness factor findings is the primary finding with the GATB Factor G.

TABLE 32

Summary of Analysis of Variance for Negro Unit Test--Subtest A, Teaching Style by GATB Factor G

	GATB Factor G Group Means			
Style	Low	Medium	High	Pooled
Recitation	16.89	19.00	21.47	19.07
Seminar	17.12	19.50	19.50	18.94
Socratic	15.53	18.64	24.22	19.45
Pooled	16.35	18.64	21.74	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	11.94	5.97	.34
Personality	2	568.01	284.00	16.24**
S X P	4	170.42	42.60	2.44*
Error	132	2308.46	17.49	

*$p<.05$

**$p<.001$

TABLE 33

Summary of Analysis of Variance for Negro Unit Test--Total, Teaching Style by GATB-Factor G

Style	GATB-Factor G Means Low	Medium	High	Pooled
Recitation	28.85	30.21	33.33	30.90
Seminar	27.12	33.43	31.20	30.63
Socratic	25.94	30.45	37.54	30.83
Pooled	27.18	31.00	33.86	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	9.87	4.94	.14
Personality	2	796.88	398.44	11.13**
S X P	4	355.14	88.78	2.48*
Error	104	3723.29	35.80	

*p<.05

**p<.001

TABLE 34

Summary of Analysis of Variance for Total of Eight Evaluation Items*, Teaching Style by GATB Factor G

	GATB Factor G Group Means			
Style	Low	Medium	High	Pooled
Recitation	21.84	20.96	23.48	22.09
Seminar	23.23	19.94	21.79	21.56
Socratic	21.47	25.53	18.26	20.81
Pooled	22.06	21.44	21.14	

Source of Variance	d.f.	S.S.	M.S.	F
Style	2	28.21	14.10	.53
Personality	2	29.73	14.87	.56
S X P	4	394.01	98.50	3.69**
Error	164	4377.05	26.69	

*Items scored in reverse order, so the lower the mean, the higher the evaluation.

**p<.01.

Conclusions

Typically the conclusions section for the report of research connected with a curriculum project would be expected to deal with the implications of the findings for curricular practice in the schools. Given the nature of our findings, we can dispense with this topic rather quickly and focus briefly, perhaps more appropriately, on questions of research strategy raised by the cumulative results of the Harvard and the U.S.U. Projects.

In drawing implications from our research results, it should be kept clearly in mind that the research of the U.S.U. Project was aimed at the assessment of the relative impact of teaching style, not at the assessment of the effectiveness of our curriculum in teaching analytic skills, as compared to some other curriculum. We concluded prior to the study that the evidence was clear that students taught analytic concepts would "know" them better than students to whom the concepts had not been taught.

Looking at both the Harvard and the U.S.U. Projects, we can conclude that teaching style seems to have little differential effect on the learning of analytic concepts: at least in the case of the styles and concepts of interest in these two projects. The two projects have also added confirmation to the conclusion that the correlations between personality measures and measures of learning are low and inconsistent. Furthermore, the supposition that a meaningful number of teaching style-student personality interactions can be detected with the design used--classifying students' scores on dependent variables by teaching style and by placing the lower, middle, or upper thirds of the distributions on various personality measures--has been opened to further question.

There are several plausible explanations of the failure to find interactions. It may be that such interactions do not exist. However, this suggestion flies so strongly in the face of common knowledge about the differing reactions of students to the same teacher that it is difficult to accept. Perhaps, however, without losing sight of the intended payoff of instruction, more attention needs to be paid to students' varying reactions to instruction as opposed to variation in learning from that instruction. That is, what we commonly hear verbalized are differing feelings toward the teacher or his mode of instruction; rarely do students discuss varying rates of learning with the same teacher or method. And, in fact, our own findings indicate only low, if consistently positive, relations between measures of learning and evaluations of the course (see Table 35).

TABLE 35

Correlations* Among Student Course Evaluations and Scores on Dependent Variables

	SIAT #1	SIAT #2	Headlines	Wagmis	Negro Test A	Negro Test B	Total Negro Test	Final Exam	ACOS
Eval. Total	.17	.14	.07	.20	.32	.12	.25	.10	.19
Overall Rating Item	.13	.11	.15	.10	.26	.09	.22	.10	.22
Hist-POD Comp. Item	.22	.22	.10	.12	.39	.15	.34	.29	.16

*Coefficients taken from Table 16, with the signs changed so that no + sign indicates a positive relationship.

Another explanation for our failure to find teaching style-student personality interaction effects on our dependent variables might be a lack of stylistic differences. That is, perhaps the students were not actually subjected to different treatments. We have tried to anticipate this criticism by our use of systematic observation to confirm style differences, as reported in Chapter 10. Our data do indicate that there were substantial differences in teacher behavior in applying the treatments. Our analysis could not, however, answer the question whether the interaction effect would have emerged had the teachers discriminated even more sharply among their behaviors in using the three styles.

Along a parallel vein, the lack of significant interaction effects might be attributed to not having a sustained enough treatment, especially in light of the large group instruction which all groups had in common. It will be recalled that the treatment for the U.S.U. Project involved the occasional discussion of cases during the school year, with a concentrated dose of seven discussions on problems of racial discrimination and Vietnam at the end of the year. The treatment may not have been sufficiently extensive. This criticism has considerable face validity, although it must be remembered that the Harvard Project, which involved a much greater number of treatment discussions over a two-year period, also failed to produce a large number of significant teaching style-student personality interactions.

Again, however, the students in the Harvard Project were all initially taught the analytic concepts in large groups by the same methods. This common instruction may have been more "powerful" than the differing discussion treatments. Also, in the large group instruction, teachers occasionally used behavior similar to recitation, seminar, or socratic teaching; in other words, the students' experiences outside the small group discussions may have contaminated the treatment variable.

One other approach to accounting for the lack of detection of interactions, assuming they do exist, is to consider the means by which students were classified into personality groupings for the purposes of analysis. To begin with, the selection of personality tests for the two projects has probably not been adequately based on a theoretical position relating the motivational implications of the different teaching styles (as these have, for example, been developed using dissonance theory, Shaver, 1961) to differing personality traits. The Harvard Project report recognized specifically that it was, to a large extent, a "fishing trip" (Oliver & Shaver, 1966), p. 323), using a number of promising personality measures in the hopes that some meaningful results would emerge. The U.S.U. Project, by its replicative nature, was founded on this perilous "fishing trip" procedure. It appears that a more careful selection of measures based on a more thorough consideration of the motivational variables involved might be more productive.

Along the same lines, one must also note the rather rough personality groupings used and the problems of grouping students on personality variables after treatment group assignments have been made. As is obvious if one looks at the distribution of scores on almost any personality measure for a typical sample, cutting the distribution into thirds means that the differences of a point or two may determine the group to which several subjects are assigned, and many scores in two groupings will be within a very few points of one another. Yet to go to a more extreme cut--say the top and bottom twenty-five percent--leaves a gross discrepancy in group Ns because the middle range group will be so large. Such extreme cuts also complicate the other problem alluded to above--that is, when group assignments are made on the basis of random assignments to treatments and rather small treatment groups are used (in our case, treatment group Ns were around eight), there is little assurance that the full range of every personality variable will be represented in every group. In fact, we have already noted that the lack of such representation forced us to use a two-way, instead of a three-way, analysis of variance as had been anticipated. At the same time, when several personality measures are used (e.g., in our case, twenty seven), it is impossible to use personality level as a basis for stratification in the assignment of students to treatments. (Note the advance beyond typical educational research designs when even random assignment to treatment is provided.)

The problems of a lack of a theoretical base for the selection of personality variables of interest and of obtaining adequate personality groupings both call for a similar solution--the use of fewer, more carefully selected tests. In fact, tests selected on an adequate theoretical basis should be administered prior to assignment to treatment groups (instead of only prior to treatment, as was the case with our research) and scores on the tests used as a basis for stratified assignment to insure proportional representation of the personality levels in all treatment groups.

This procedure would call for a different research strategy. Instead of a design requiring a school year, or some such comparable period for execution, a series of shorter experiments would be in order in which a number of variables could be systematically tried out and rejected or retained. This sort of study might well be preceded by factor analysis of various personality measures as part of building the basis for selection of variables, and perhaps as a means of reconstructing tests so that measures with similar loadings could be combined for use in one of the series of studies.

This research strategy appears to call for what many might consider a regressive step--the use of a more carefully controlled laboratory setting than is possible in the public schools. Such a setting would not only make a series of short studies more feasible because of fewer curricular scope and sequence demands, but would make possible even more rigorous control of teaching style. Providing the base for such studies is a function which a university laboratory school might well perform. And, turning to laboratory research is not necessarily a regressive step; in the long run, it would be highly productive, if researchers will remember to take their promising laboratory findings to the classroom for further testing.

The relationship between teaching and learning is *the* central concern of education and, hopefully therefore, of the educational researcher. There is little doubt that research involving gross comparisons of teaching methods or overall correlations between personality and learning variables has added little to our knowledge of the teaching-learning process. Looking at teaching style-student personality interactions in effecting learning has a great deal of appeal as an approach to the problem, in light of our common knowledge of varying reactions to the same teachers or techniques. Yet the type of research design employed by two major social studies projects has not produced fruitful findings, unless one is to accept what might be a logical conclusion--that the effects of teaching style-student personality interactions on learning are too slight to account for an educationally significant amount of variability in learning.

We propose that the attempt to find interaction effects not yet be abandoned (nor the failure to find such effects excused on the basis that they were there, but the right dependent variables were not used), but that a careful reassessment of research design strategies form the foundation for further studies. In the meantime, the researcher will simply have to admit to his educational practitioner colleague that he is basically ignorant about a question of prime concern to those responsible for the formal education of the young.

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APPENDIX A

CASES USED IN DISCUSSIONS SCORED FOR TEACHING STYLE DIFFERENCES

Conscience or Obedience?

The first week in January, 1968, the *New York Standard Journal* ran the following article on page one:

PEACENIKS SEND DRAFT CARDS TO GENERAL HERSHEY

Two weeks later the following article appeared in the same newspaper:

PREACHER AND BABY DOCTOR INDICTED

The articles have been deleted due to copyright restrictions.

DEFACTO SEGREGATION

James Hilliard, Chairman of the Highland City School Board, brought the meeting to order. "Is there any business which members of the audience wish to bring to our attention?"

Edward Thatcher, a prominent negro attorney in Highland City, rose to his feet and was recognized by Mr. Hilliard.

"Mr. Hilliard, fourteen years have passed since the Supreme Court of the United States ruled that racial discrimination in the public schools of this country is unconstitutional. Yet, today we see no substantial change in the very apparent pattern of segregation in the public schools of Highland City. When does this school board intend to grant our children their constitutional right to equal protection before the law? What do you intend to do about the problems of racial segregation?"

Mr. Hilliard looked disturbed. He pondered Mr. Thatcher's question for a moment, then turned to his fellow board members. "Would one of you gentlemen care to respond to this question?"

Harmon White, who won his seat on the school board by promising not to pamper negro students, spoke up. "You people are never satisfied. We don't practice racial segregation in our schools. If a student doesn't want to attend the school to which he has been assigned, he may petition to attend the school of his choice. His petition will be granted, unless the school is overcrowded, of course."

It took a conscious effort, but Thatcher's voice was controlled when he replied. "Our children are not free to attend the schools of their choice. The best schools are always the first to fill up. Furthermore, when a student makes a special application to attend one of the predominantly white schools, he is singled out for all kinds of abuse: His family is frequently threatened over the phone, his father may lose his job, or the family may be kicked out of their apartment. Moreover, it isn't particularly pleasant for a negro to attend a school where 97 percent of the students are white. Imagine, for instance, how it would be for a white student to attend Eastend High where more than 95 percent of the students are black."

Mr. White's eyes flashed. "This is just another example of the negroes in this town not being satisfied with equal treatment and freedom of choice. What sort of preferred treatment are you after now? Do you want us to force negroes and whites to go to school together?"

Thatcher forced himself to lower his voice and talk slowly. "The school board has the legal authority to establish attendance boundaries for the four Highland City high schools. The present boundaries do not force negro students to attend Eastend High, but they make it difficult for them to attend any other school. If the present boundaries were changed to run east and west, rather than north and south, approximately 25 percent of the negro high school students in this city would easily be assigned to each of our four schools. Even if the present rule allowing students to petition to attend the school of their choice were retained, the defacto segregation which now exists would be largely eliminated. All we are asking is that the present boundaries, which encourage racial segregation, be changed to encourage equal treatment of all students."

White turned his back on Thatcher and addressed his remarks to the other members of the board. "Mr. Thatcher can dress his appeal in fine words, but it doesn't change the fact that he is asking for special treatment. When everything else is stripped away, it is still quite clear that he is trying to force integration. I believe that forced integration is just as evil as forced segregation. I would also ask you to remember that the present boundaries allow most students to walk to school. Under Mr. Thatcher's plan, we would have the added expense of busing some white students from the East side of town to Westside High. I don't think the extra expense is justified."

The school board promised to announce their decision on Edward Thatcher's plan at the next monthly meeting. If you were a member of the board, how would you vote?

THE CHICAGO CONVENTION

By 9:30, the members of the Coordinating Committee for Black Action were assembled in Greg Williams' room at the Chicago Concord Hotel. After the last person arrived, the usual courtesies were met, all eyes turned to Greg, who rose slowly from his chair and spoke in a low, apologetic voice. "Gentlemen, I've changed my mind. I'm no longer willing to lead demonstrations against the National Democratic Convention this summer." Greg paused long enough to review the faces of his companions. Some looked stunned, others angry, a few seemed pleased. "Events since the death of Martin Luther King," he continued, "have convinced me a peaceful demonstration cannot be held in Chicago this summer. I cannot escape my personal responsibility, knowing that wholesale violence will follow any attempt to conduct extended non-violent demonstrations. The members of this committee are free, of course, to decide what course of action they will follow."

Austin Downs spoke next. His dignified bearing always commanded respect. "I do not believe in violence. I will not take violent action against any man. But, I believe in what we are doing. The Democratic Party has been the seat of power for 28 of the last 36 years. Their image, as the champion of freedom and democracy, will be seriously damaged if racial strife prevents them from holding their nominating convention. If we're successful this summer it will be impossible for the white power structure to further ignore our constitutional rights." To this point, Austin addressed his remarks to the group in general. He now turned and spoke directly to Greg Williams. "I will be in the streets of Chicago this summer. I will encourage our people to peaceful demonstrations. If violence occurs, I will try to stop it. But, above all, I will not run away to ease the conscience of a racist white community. The white man's sickness has reached its crisis, and I think the fever will break in our favor if we have the courage to see it through. We have a responsibility to both non-violence and the freedom of black people. I will not run away from either responsiblity."

Tony Berg's voice broke in immediately. "I stand with Austin. I never thought I'd see the day that Greg Williams would knuckle under to the white power establishment. I say we have to go to the streets. It's the only realistic alternative open to us. Can you honestly say that blacks are fairly represented in the political structure of this nation? We're ten percent of the population. How many negro Presidents have there been? Or governors, or senators, or representatives? How many negro judges are there? Or mayors, or city councilmen? Whenever we try to solve a problem by going through the normal political channels, who do we have to go to? Yeah, we go see Whitey!" Tony's words shamed the others. All but Greg were staring at their feet. Tony now paced the floor and shook one fist in the air as he spoke. "For years we wasted time talking while Whitey turned a deaf ear and told us to be patient. But the Man listens when we act. He passes laws only when things get hot. Things will get hot this summer, if we don't sit on our hands. Yes, this town will burn if we go into the streets. And, yes, people are going to get hurt. A lot of people will get hurt! But, it's worth the price! Whitey's willing to hurt people to help the Vietnamese win their freedom. I'm willing for people to get hurt in order to win our freedom. Whether Greg is with us or not, I say the Man's not going to hold that convention! Those of us who are willing to demonstrate for freedom, even at the risk of violence, should stand with Austin!"

APPENDIX B

SCORING CONVENTIONS FOR THE ANALYTIC CONTENT OBSERVATION SYSTEM (ACOS)

The unit to be scored is the single item of thought. Compound sentences are generally scored as two units, complex sentences as one. Idiosyncratic mannerisms of speech or casual comments such as "yeah", "yes", "no", "yeah but", "uh huh", and "OK" are not scored unless they serve a discernible cognitive function.

One unit is scored in each column of the scoresheet for Categories 1 through 15. Units falling in Categories 16 and 17 are also *scored in Categories 1 through 15*. That is, some units are double-scored.

Each unit is scored using one of the following symbols to indicate a statement posture:

X = Declarative (and persuasive or procedural) posture.

U = Interrogative (and persuasive or procedural) posture.

Ⓧ = Declarative and analytic posture.

Ⓤ = Interrogative and analytic posture.

The observer can usually discern quite readily *interrogative* from *declarative* statements. However, the persuasive-analytic posture distinctions are not as easily made. Most statements will be directed to the persuasive discussion of the problem under consideration. That is, they will either be aimed at convincing others that the speaker's judgment or evidence, definitions, analogies are correct. In addition, some statements will be oriented toward discussion procedure, e.g., "Let's take a look at another aspect of the issue". Such statements are usually scored in the categories *Focus* or *Task Direction.*

Some of the statements in a discussion attempt to "pull out" of the *persuasive* posture and suggest how the issues might be more adequately analyzed. These statements are scored as *Analytic.* Statements with an *Analytic* posture are concerned with the *process* of problem solving rather than the actual solution (e.g., "Maybe we should examine our assumptions". Score *Assumption, Analytical* posture) or with intellectual strategies or processes rather than classroom processes. A cue to *Analytical* posture is the use of, or reference to, the analytical concepts taught the students, as described in the *Outline of Concepts.* E.g., "This is really a value rather than factual problem". (Score *Distinction,* Declarative--Analytical) "I wonder if our definition of democracy is adequate?" (Score *Clarification Definition,* and *analytical* posture.) Statements not scored *analytic* are assumed to be *persuasive* or *procedural.* A statement scored in the *analytic* posture and in a *non-valued* category is given one value point. A statement scored in the *Analytical* posture and in a *valued* category is given two value points.

Analytical posture is scored with Categories 16 and 17, the two dynamic categories.

When in doubt about categorization of a statement, the valued categories should be favored. A general cue to placement in a category is the specific use of words in the category title. Also, declarative statements which follow interrogative statements--requests for information--are *usually* scored in the same category as the interrogative statement.

Categories

1. *Factual Claims* are statements describing events, or generalizations based on the description of events. They include statements of causal relationships and explanations, as well as simple descriptive statements. References to the document (i.e., the case) describing the issue under discussion are scored *Factual Claims*.

   Statements scored in this category *are not* valued.

   Examples:

   a. "All the people on our street are narrow-minded."
   b. "The case is biased toward the school administration."
   c. "Our town is losing its youth to the larger cities."
   d. "That's what it takes--nerve--to stand up for your rights."
   e. "I think Clyde Dunbar is guilty of treason; nevertheless he has the right to trail by jury as provided by our system." (*Factual Claim* and *General Value Judgment*--2 units)

2. *General Value Judgments* are statements or decisions which express a preference for, or commitment to, general moral values--basic to human dignity. General values include: personal freedom, including property rights, contract rights, free speech, religious rights, and freedom of conscience; community, national, or general welfare; necessities of life, including the right to work, the right to health, the right to eat, the right to shelter, the right to a decent living, etc. Verbal cues to a general value judgment are "ought", "should", and "right". Reference to values held by a large number of people or by persons in varied geographical areas is not necessarily a reference to a general value.

   Value judgments which "move" from specific to general are scored *General Value Judgment*, although the form may appear as a *Factual Claim*. E.g., "He shouldn't be convicted, he still has his free speech". (Score *Specific Value Judgment* and *General Value Judgment*--2 units)

   Statements scored in this category *are* valued.

   Examples

   a. "Men should have equal opportunity for employment".
   b. "Mr. Crane should be allowed to express his opinion because we believe in free speech". (*Specific Value Judgment* and *General Value Judgment*--2 units)
   c. "Should Mr. Gibson be allowed to move into the neighborhood? Or should he be denied the property rights accorded him by our constitution?" (*Specific Value Judgment* and *General Value Judgment--interrogative,* 2 units)

3. *Specific Value Judgments* are statements that indicate the speaker thinks that an object, person, action, item, or decision is good or bad, desirable or undesirable. Statements about desired action are included here. (Statements of policies to resolve value conflicts are scored in category 9.) Verbal cues are "should", "ought", and "right".

   Some statements phrased as claims may actually be intended to convey a preference and should be scored as value judgments; e.g., "There has to be restraint in dealing with draft-card burners", (meaning there *should* be) or "They can't do that", (meaning they shouldn't).

   Statements scored in this category *are not* valued.

   Examples:

   a. "Henry Saxton should be put in prison".
   b. "We should all be more respectful of our neighbors". (Although this is general to all men, it is not basic to the dignity of man, nor is it a basic moral value, therefore it is specific and *not* scored in category 2--General Value Judgment).
   c. "All men ought to serve in the military".
   d. "It isn't right that Jim should be dismissed from school; he hasn't really broken any rules". (*Specific Value Judgment* and *Factual Claim*--2 units)

4. *Repeat, Summarize, Focus.* Statements which restate what has happened during the discussion, or direct attention to what is happening or going to happen or which suggest a direction for discussion are scored in this category.

   A *Repeat* must be practically identical to the original statement.

   A *Summarization* must not add new descriptive or evaluative elements.

   Focus draws group attention to the direction of discussion (e.g., "Let's consider the first point".) or ideas expressed by others (e.g., "How about Bob's idea?") without adding new material. It is an attempt to deal with the process of the discussion, including directing attention to a new direction for discussion: e.g., "We have discussed what Henry was doing on the night of the incident *(Summarization)*, now let's discuss whether he is telling the truth". *(Focus)* "We are drawing conclusions about his guilt, but that is not the issue we should be on". (*Summary* and *Focus*)

   Factual Claims and *Value Judgments* with an *Analytical* posture may appear to take the form of a summarization; the scorer should be cautious to score these in the appropriate category; e.g., "We first decided he should be hired. *(Summarization)* Although he's considered qualified and experienced, there might be another issue to consider". *(Factual Claim--Analytical* and *Tentativity)*

   Statements in the *Repeat, Summarize, Focus* category *are not* valued.

   Examples:

   a. "Conscientious objectors to war should still have to serve their country in some capacity". *(Specific Value Judgment)* "Objectors ought to serve their country somehow". *(Repeat)*
   b. "We have been discussing compulsory military service, the draft, and obligations of citizenship". (*Summarization*--3 units)

c. "I think the point Mary brought up a minute ago about the obligation of high school students toward their country deserves more careful consideration". *(Focus)* "Let's discuss her point more carefully". *(Task Direction)*
d. "What was it you said, Mary?" *(Repeat, interrogative)*

5. *Clarification.* Comments to explain or make clear the meaning of a statement, or idea are scored in a *Clarification* as (a) *Content* or (b) *Assumption.*

(A) The attempt to clarify the *Content* of a sentence or set of sentences, not to define or clarify a specific word, is scored in this category. Attempts to clarify the meaning of specific words are scored in the category *Definition.*

Statements of *Content Clarification* are valued.

Examples:

a. "If Richard Crane applies for the job and he's qualified, he should be considered". *(Specific Value Judgment* and *Qualification)* "What I'm saying is that qualifications are often overlooked in hiring". *(Content Clarification)*
b. "When I talked about hiring a person for a job, I wasn't referring to just any kind of person--I meant a trained person". (*Content Clarification*--2 units)

(B) Comments that explicate an assumption, point out the need to do so, or question an assumption are scored in this category. A cue is the explicit use of the word, *assumption.* Further discussion or analysis of the assumption is scored in the appropriate category.

Statements of *Assumption Clarification* are valued.

Examples:

a. "Aren't you assuming that all of your neighbors feel the way you do about minorities?" *(Assumption)*
b. "I'm assuming that all of us are in agreement on this issue". *(Assumption)*
c. "Aren't you jumping to conclusions about the way the rest of us feel?" *(Assumption)*
d. "You said that James Connely was hunting in the mountains the night Dr. Klineburg's house was bombed. *(Summarization)* You really don't know that he was". (A challenge to *Assumption*)

6. *Language.* Statements that identify or attempt to handle communication problems in the discussion are scored in a *language* category.

(A) Comments which define or request a word definition, clarify or request clarification of a word, or attempt to deal with the vagueness or ambiguity of words are scored as *Definition.*

Definition statements are valued.

Examples:

a. "When I talk about negroes I'm referring to southern negroes in this case".

b. "What do you mean by the International Youth Movement?"
c. "What does it mean, one has the *right* to assemble?"
c. "By *equality*, in this instance, I mean each man should have the same opportunity as every other man to try for the job".

(B) Comments that indicate the recognition or use of emotive loading in words, or that request clarification of the use of emotive loadings in language used are scored in the *Emotive Loading* Category. The use of emotively loaded words in discussion is not scored, only the identification of them, initiating attempts to focus attention on the speaker's use of emotive language.

Statements in the *Emotive Loading* category are valued.

Examples:

a. "Isn't your use of the term 'stupid' rather strong language to describe a person as educated as Mr. Crenshaw?"
b. "When you use those loaded words to describe people it makes me mad".
c. "In using those emotive terms, such as 'nigger', you cause resistance and we don't accomplish anything in the discussion". *(Emotive Loading, Factual Claim, Factual Claim*--3 units*)*

7. *Challenge or Support Claims.* Comments that object or take exception to statements or ideas which have been expressed are scored as *Challenge.* Statements that indicate approval or agreement with previous statements or ideas are scored as *Support.* Statements offering support in response to a challenge to a previous claim are scored in the *Support* category.

Most statements offered in discussion are, to some degree, either challenging or supporting claims; however, to be scored in this category, statements should contain explicit indication of intent to challenge or support a specific claim. Furthermore, to be scored in the category, *Challenge-Support,* statements must have reference to: (A) *Sample;* (B) *Analogy-Analysis;* (C) *Source, Authority,* or *Evidence;* or (D) *Uncritical Challenge.* Other statements which serve a discernible cognitive challenge or support function, but which do not have reference to Categories A, B, C, or D above, are scored in the appropriate category elsewhere. For example, challenges to definition are scored in the definition category.

(A) Statements questioning the adequacy of, or expressing support for the sample upon which a claim is based are scored in the *Challenge-Support* (A) *Sample* category. Often the challenge will question the size of the sample, or how the sample was drawn.

Statements in the *Challenge-Support* (A) *Sample* category are valued.

Examples:

a. "When you say 'the neighbors are against integration', which neighbors are you referring to?"
b. "I think all of the senior boys at school would like to see an end to the draft law". *(Factual Claim)* . . . ."I don't think you mean *all* of the boys, do you?" *(Sample)*
c. "The sample on which you base your claim is too small to justify such a generalization about minorities". *(Sample)*

(B) Statements that question or support a claim made through the use of an analogy are scored *Analogy Analysis*. Challenges to analogous cases are usually on the grounds that the two situations have important differences.

Statements in the *Analogy Analysis* Category are valued.

Examples:

a. "If we let the Communists take over Vietnam they will soon take over all of Southeast Asia". *(Factual Claim)* "Look what happened in Europe when Hitler was allowed to move into countries bordering Germany". *(Case)*
"The case of Hitler was different from the situation in Southeast Asia". *(Analogy Analysis)*
b. "The teachers should be allowed to assemble and picket the school board". *(Specific Value Judgment)* "We all have the right of assembly and the right to express our grievances". *(General Value Judgments--2 units)*
"Suppose the students of Lincoln High School picket the school to express their grievances. *(Case)* Should they be allowed to do this?" *(Specific Value Judgment)*
"Yes, it would be all right". *(Factual Claim)*
"Suppose they continue to do it for several days because the school administration won't respond to their grievances. *(Case)* Is this still all right?" *(Specific Value Judgment)*
"No, that's different because there are attendance laws that say students must be in school until they're 18". *(Analogy Analysis)*

(C) Some statements request verification of a claim; these will usually take the form of a request for the *Source, Authority* or *Evidence* used to support the claim.

Statements in the *Source, Authority, Evidence* Category are valued.

Examples:

a. "They're making biological and chemical warfare materials at our local university". *(Factual Claim)*
"Who do you mean--'they'?" *(Definition)* "Who told you that?" *(Challenge-Authority)*
"How can one know for sure whether such types of warfare materials are being developed at the University?" *(Challenge-Evidence)*
b. "What is the source of your information that students are going to demonstrate at city hall?" *(Source)*
c. "How do you know?" This may be a ploy, a request for verification of a claim, or an inquiry regarding an assumption, depending, to a large extent, on the tone of voice. The observer needs to use discretion in scoring such questions.

(D) Statements which question claims without specific reasons or further discussion or without specifying one of the valued *Challenge-Support* categories, or which do not challenge or support statements in other categories in the category system are scored *Uncritical Challenge*.

These statements *are not* valued.

Examples:

a. "What you say is not correct".
b. "Prove it".
c. "You're wrong".
d. "Aw, you really don't know".
e. "Oh, they do too".

8. *Distinction.* Comments that distinguish ethical from non-ethical issues, public from private issues, factual from value issues, factual from definitional issues, and value from definitional issues, and which show explicit awareness of the distinction, are scored in this category.

Distinctions are often made in discussion; the scorer looks for cues that the speaker is aware of the distinction he is making. Often cues will be found in statements of clarification or other comments which follow the distinction statement. Furthermore, only the distinctions listed above are scored; others are scored in the appropriate category, usually *Factual Claim* or *Specific Value Judgment.*

Statements scored in this category are valued.

Examples:

a. "Sex education should not be part of the school curriculum; it is a personal matter for the home". (*Specific Value Judgment* and *Distinction*--2 units)
b. "The fact of the matter is, pornographic literature is available *(Factual Claim);* it's not a matter of whether it should be allowed; *(Distinction),* it *is* available". *(Repeat)*
c. "Sex among teen-agers is a moral issue rather than a legal matter *(Distinction);* you can't legislate against it". *(Factual Claim)*
d. "It is against the law to take narcotic drugs. *(Factual Claim)* I don't know which is best--to stress that it's legally wrong, or that drugs shouldn't be taken because they might be harmful". *(Distinction)*

9. *Value Conflict Resolution.* Statements scored in this category are usually: 1) referring to a third higher value and suggesting which of the conflicting values will support it, 2) suggesting another policy that will support it, or 3) proposing cases to challenge or clarify value positions.

Statements scored in this category *are* valued.

Examples:

a. "Part of the neighborhood is *for* integration through housing and part of the neighborhood is very strongly against it". (*Factual Claim--2 units*) "Because it would probably cause bloodshed presently, *(Factual Claim)* perhaps we should not plan to integrate by selling the Jones home to negroes--at least for the present". *(Value Conflict Resolution)*
b. "Are you against gambling in any form?" *(Factual Claim)*
"Yes, it is wrong". *(Specific Value Judgment)*
"Would you agree that the schools in this state are in desperate need of additional revenue?" *(Factual Claim)*
"Indeed they are". *(Factual Claim)*

"Would you be against the state allowing people to bet on horse racing if it brought revenue to the schools?" *(Resolution by Case)*

c. "The administration is against boys wearing their hair long because they claim it 'interferes with the functioning of the classes'". *(Factual Claim--2 units)*
"Parents maintain that dress and appearance are matters of personal concern". *(Factual Claim)*
"Perhaps we should examine more carefully the role of the school in personal matters. Further, it would seem that parents should be included more in the decision making of the school". *(Conflict Resolution--2 units)*

10. *Frame of Reference*. Statements that indicate an awareness that ideas of what is, can be, or should be are affecting the speaker or another's position on an issue are scored in this category. Statements must include the terms *Frame of Reference,* or be an explicit use of the concept to be scored.

Statements scored in this category are valued.

Examples:

a. "I don't think you should have to sell houses to minority groups if you don't want to." *(Specific Value Judgment)*
"You were raised in a small town *(Factual Claim)*, that's why you are so narrow-minded about minority groups". *(Frame of Reference)*
b. "His mother has the same opinion *(Factual Claim)* and he probably got his opinions from her". *(Frame of Reference)*
c. "His attitude toward the draft has been influenced by his career in military service". *(Frame of Reference)*
d. "Where did you get that warped notion? Your frame of reference is surely narrow". *(Frame of reference--2 units)*

11. *Relevance*. A statement that asks for, questions or states whether a previous statement is pertinent or central to the argument is scored as *Relevance*. *Relevance* usually refers to a specific statement made, and not to an idea or theme in general.

Statements in this category are valued.

Examples:

a. "The example you gave is not relevant to the issue under discussion".
b. "How does your statement apply to this situation?"
c. "When you say that 'all men are created equal', I don't see how that relates to whether prisoners convicted of major crimes should be given the opportunity to vote".
d. "I don't see what that has to do with this case".

12. *Cases* are statements of hypothetical or real situations that are assumed to be similar to the one under discussion. They are usually posed to clarify a position or claim. Challenges to the analogue are scored *Analogy Analysis*. Cases used to resolve conflict are scored *Value Conflict Resolution.*

Statements in the *Case* Category are not valued.

Examples:

a. "Richard Crane is a negro and cannot find a job although he is a skilled lens-grinder". *(Factual Claim)* "John Decker is one who has refused to hire Crane because he is sure it would hurt his business". *(Factual Claim--2 units)*
b. "Suppose you were John Decker". *(Case)* "Would you hire him?" *(Specific Value Judgment)*
c. "If Crane's preparation and experience indicated high quality performance, and he would probably be an asset as far as quality of work in your shop, *(Case--2 units)* would you hire him?" *(Specific Value Judgment)*

13. Statements that recognize debate tactics, diversionary tactics, or persuasive efforts of a previous speaker and which describe, though briefly, characteristics or the nature of the tactics or efforts, are scored *Debate Strategy*. Statements which explicitly identify the speaker's strategy or intended discussion strategy are scored; e.g., "I'm going to take a different position".
Statements in this category are valued.

Examples:

a. "In using those ridiculous examples you are just trying to distract the discussion".
b. "I recognize what you're trying to do; you're trying to overwhelm us with your fast talk so we'll get all mixed up". *(Debate Strategy--2 units)*
c. "I don't agree with you *(Factual Claim)* but your cleverly worded argument is convincing".

14. *Diversionary tactics* are ad hominem statements or other comments that divert the discussion out of context or indicate that the issue is being taken lightly. Tactics that seem aimed at deliberate confusion or at avoiding the issue under discussion are also scored. The use of sarcasm and flippant comments are cues. Casual comments with no particular cognitive content used for group tension release are scored.
Statements in this category are not valued.

Examples:

a. "You really can't believe that"!
b. "That's tough".
c. "You could help the poor people if you were superman".
d. "I think we should explode a few hydrogen bombs and solve some of the problems of population".

15. *Task Direction.* Statements controlling the discussion itself, setting procedures, or suggesting that procedures should be followed are scored. The statements may be aimed at deviant behavior, e.g., "Be quiet, so we can discuss the case", or at task-oriented behavior--e.g., "Let's look at our cases and read that paragraph again".
Statements in this category are not valued.

Examples:

a. "let's go around the circle and express our opinions".
b. "We're not getting anywhere by everyone talking at once; *(Factual Claim)* let's get organized". *(Task Direction)*
c. "Come on, Jim, get serious about the issue".

16. *Consistency-Inconsistency* comments are considered to be dynamic and depend on the context of the discussion. Statements that indicate explicitly or implicitly that the speaker is aware of a real or possible consistency or inconsistency within his own or another speaker's position are scored in this category. The inconsistency may be between two values, two facts, or two definitions. Immediate elaborations or repeats of the consistency or inconsistency are not scored.

Statements in this category are double scored with Categories 1 to 15. The *Consistency-Inconsistency* category is valued.

Examples:

a. "You believe that all men should have an equal opportunity for employment; (Reference to a previous claim--*Summarization)* and yet you would not hire a person qualified for a job because he's a negro?" (Reference to a previous claim--*Summarization*--and *Inconsistency*)
b. "I guess I'm inconsistent because I believe in free speech *(General Value Judgment)* yet believe that Students for a Democratic Society should not be allowed to speak and cause unrest on college campuses". *(Specific Value Judgment* and *Inconsistency)*

17. *Tentativity-Qualification* statements are ones that point out circumstances in which exceptions to a general rule are allowable, or that indicate less than an absolutist position. Expressions of self-doubt are scored as *Tentativity*.

Statements in this category are double scored with any of the categories 1 to 15, and are valued.

Examples:

a. "If students were allowed more opportunity to discuss their school problems in the open, there might possibly be less trouble for the faculties". *(Factual Claim* and *Tentativity)*
b. "I'm not sure this is the best solution to the problem". *(Factual Claim* and *Tentativity)*
c. "I would be in favor of that law if you can convince me that it would not result in violence". *(Value Judgment* and *Qualification)*
d. "If Richard Crane had a real dynamic personality to go along with his skill as a lens grinder, my reservations about hiring him would not be as intense". *(Factual Claim* and *Qualification)*

APPENDIX C

CASES USED FOR LEADERLESS DISCUSSIONS

THE ARMBAND CASE

Martin Wright knocked lightly on Dr. Stewart's door, heard a booming "Come in," and stepped into the principal's large carpeted office. From behind his desk, Dr. Stewart motioned for Martin to sit down. "I've heard a rumor that you and two of your friends plan to have some sort of demonstration tomorrow. Of course, I thought I'd nip this thing in the bud by talking to you directly. What's the story?"

Dr. Stewart's authoritative manner made Martin's hands perspire and his mouth go dry. He managed, however, to speak in a nearly normal voice. "I wouldn't exactly call what we had in mind a demonstration. Jerry and Ken and I are disturbed by the number of people that are being killed in the Vietnam War. We'd like to see the war come to an end, and we think that we have an obligation to communicate our beliefs to other people. To show our concern, the three of us plan to wear black armbands to school tomorrow."

The principal shook his head. "We can't let you do that. Taxpayers expect our school to teach patriotism. Disloyal demonstrations, held on school property, would only cause trouble with our patrons. Also, you know that feelings about our involvement in Vietnam are strong. Many students would object loudly to your demonstration and the result might well be a disruption of school. It is my responsibility to see that learning is not interferred with."

Dr. Stewart's attitude slightly angered Martin, and made him forget his discomfort over being in the principal's office. "Look, my parents are taxpayers too, and they've always taught me that the best way for a citizen to demonstrate his loyalty is to be willing to take a stand and speak out on important problems. How will students learn to carry out these responsibilities as adults if they are not encouraged to do so as students?"

Becoming impatient, Dr. Stewart walked around his desk and stood over the chair in which Martin sat. "You boys are only trying to attract attention to yourselves. The more attention you get, the more successful you think you'll be. But, I'm responsible for the welfare of the entire school. As far as I'm concerned, the more attention you get, the more the normal functions of this school will be disrupted."

Feeling uneasy with the principal staring down at him, Martin stood up and moved toward the door. "Well, I notice that you didn't complain when Congressman Hayward spent forty-five minutes telling the entire student body what a fine thing it is that this country is willing to send soldiers to Vietnam. It looks to me as though you're not being very consistent."

Dr. Stewart gave a sign of impatience. "I think you're forgetting your place, Martin. I have no more business telling a United States Congressman that he can't give a speech in a public school than you have telling me how to educate students. Now this is my final word. I won't have you people disrupting this school. If you wear those armbands tomorrow you'll be suspended from attending classes until you're willing to cooperate."

BUGGING THE PRISON

Sheriff Gains entered the reception room, shook Byron Rothy's hand, put one arm around his shoulder, and led him to the inner office. He offered Rothy a cigar, graciously accepted the polite refusal, lit one for himself, learned back in his swivel chair, and asked, "Now why is a Civil Liberties Union lawyer paying visits to the Bayou Parish Prison?"

"Well, Sheriff, I've heard rumors that this place is bugged. Some people have been saying that you've got microphones hidden throughout the prison so that you can listen to inamtes' private conversations."

Gains studied the end of his cigar for a moment, then smiled. "Are you trying to make me think that you folks deal in rumors? You've got something more than idle gossip to back up that claim, haven't you?"

"Yes. I've got a copy of the architect's wiring diagram. According to it, every room in this prison is wired for hidden microphones. Do you claim that the diagram is incorrect?"

"Well, counselor, what if I did claim that we're clean; what would you do?"

"I'd do exactly what you think I'd do, Sheriff, I'd demand to take a look for myself."

Gains studied Rothy closely for a moment, then shrugged. "All right, save yourself the trouble. Sure, this place is bugged. Why shouldn't it be? You seem to think that we're talking about the rights of ordinary citizens. These men are criminals. Many of them are dangerous. If having a few microphones hidden here and there helps prevent a prison riot, or a jail break, I say it's well worth it. In fact, it's probably the best thing we ever did to improve prison security."

"Yes, I bet it is! But in the meantime you've seriously violated several Constitutional rights, such as the Fifth Amendment protection against self-incrimination. The right to refuse to testify against yourself was designed specifically to protect the accused. When you eavesdrop on the conversations of prisoners, you obtain self-incriminating testimony which is not voluntarily given. Furthermore, you surely must know that bugging the consultation rooms violates the privileged relationship between a lawyer and his client. Lawyers and their clients have traditionally been protected from divulging the content of their conversations. Or do you believe that the Bar Association in this parish has been aiding and abetting jailbreaks?"

"Now cool off,Rothy. Of course I know that the lawyer-client relationship is privileged. There's microphones in the consultation rooms, but we never use them when a lawyer is speaking to a prisoner."

"Your word on that isn't much comfort! The only way to insure that the lawyer-client relationship will be respected is to remove the microphones. But, you know sheriff, apart from all the legal questions, I think that a plain old decent regard for privacy would cause you to at least refrain from monitoring conversations between prisoners and their wives. Surely, even a prisoner has the right to have a few moments of private conversation with his family."

"Rothy, you bleeding hearts are something else! You think more of the so-called rights-of-criminals than you do of the safety of this community."

"You're wrong there, Sheriff. It's just that we don't think that anyone is secure once you people start tampering with our privacy."

GAMBLING AND EDUCATION

Jane Arden and Agnes Loftus sat in their Las Vegas hotel room discussing the merits of the Nevada school system. The educational tour, which brought them from Utah to Nevada, had left the ladies tired, but enthusiastic.

Jane slumped in the easy chair, and, as she spoke, propped her feet on the bed. "I've always been proud to be a Utah school teacher. We haven't been paid as much as I think we deserve, and of course, we could always use better equipment and hope for smaller class loads, but I've still been convinced that our teachers were the cream of the crop and that our school system, taken as a whole, was as good as any in the nation. However, the things we've seen in Nevada make me wonder if the Utah schools aren't falling behind."

Agnes nodded in agreement. "It has been an impressive tour. Everything here seems to be right up to date. The buildings, equipment, materials, and instructional programs incorporate all the latest ideas, many of which I hadn't heard of before." Agnes paused for a moment and sighed then she said, "I'm almost sorry we came. Our children certainly deserve all the educational advantages these Nevada youngsters are getting, but I'm afraid that parents in Utah won't be willing to increase property taxes to pay the bill."

Jane shot a quick glance at Agnes, and there was a mischievious gleam in her eye when she said, "There's no need to increase taxes. Our schools can have all the expensive things we've seen the last few days and it won't cost the taxpayer an additional ten cents. In fact, if we did things the way they're done in Nevada we could probably lower our tax rate."

Agnes was clearly interested, but she suspected that Jane was playing another of her practical jokes. "Go on," she said.

Jane obviously enjoyed keeping Agnes guessing. She shook her head and replied, "No. I don't think I will. You're not really as devoted to education as you pretend. Even if I told you how we could get all the money our schools need, you would be against it. We could never depend on you to help put the plan across."

It suddenly occurred to Agnes that Jane was talking about gambling. She shook her head vigorously and declared, "If you think that I'll resist turning Salt Lake City into another Reno or Las Vegas, you're absolutely right! You know how I feel about that sort of thing. I'd rather see our children go to school in log cabins than grow up in a corrupt society that makes its living by pandering to the weaknesses of a horde of gamblers!"

"Oh, don't be silly," scoffed Jane. "Most of the people who gamble in Nevada are ordinary people just like you and me. They don't expect to win a lot of money, and they're not sick. It's just good clean entertainment to them, like going to a show or watching a football game. They enjoy it, and they're willing to pay the price to be entertained. Besides, the money is used for good purposes. It not only builds schools, but also allows Nevada to have an excellent highway system, modern hospitals, and low taxes."

By now Agnes was visibly shaken. She leveled her gaze on Jane and spoke evenly and firmly. "You seem to forget that my late husband was a gambling addict. We were poor and miserable all the years of our marriage because he couldn't resist the desire to gamble. I would never vote for gambling in this state!"

Jane thought that if Agnes' husband hadn't been a gambling addict, he would probably have ruined himself in some other addiction, but she kept her thoughts to herself. She shrugged her shoulders and picked up a magazine from the nightstand. "You needn't get angry. It seems to me that when we are spending thousands of dollars in advertising to attract more industry and tourists to Utah, that we could at least calmly discuss a method which has proved to be so successful for Nevada."